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THE WEST VIRGINIA

Medical Journal

OFFICIAL ORGAN OF THE WEST VIRGINIA STATE MEDICAL ASSOCIATION

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VOL. 57, NO. 1 JANUARY, 1961

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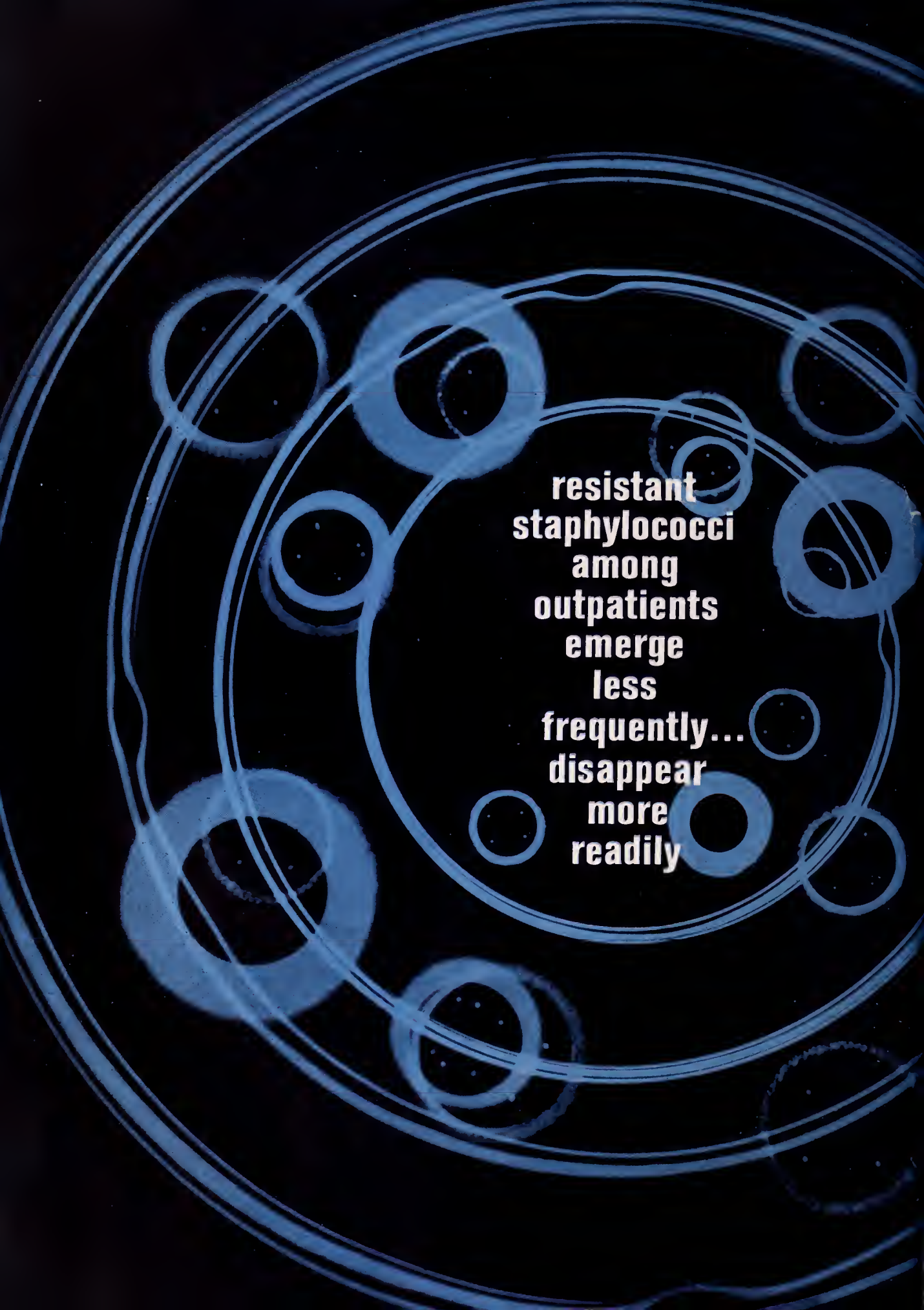
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References: (1) Bauer, A. W.; Perry, D. M., & Kirby, W. M. M.: *J.A.M.A.* 173:475, 1960. (2) Goslings, W. R. O., & Büchli, K.: *Arch. Int. Med.* 102:691, 1958. (3) Goodier, T. E. W., & Parry, W. R.: *Lancet* 1:356, 1959. (4) Fisher, M. W.: *Arch. Int. Med.* 105:413, 1960. (5) Petersdorf, R. G., *et al.*: *Arch. Int. Med.* 105:398, 1960. (6) Glas, W. W., in Symposium on Antibacterial Therapy, Michigan & Wayne County Acad. Gen. Pract., Detroit, September 12, 1959, p. 7. (7) Modarress, Y.; Ryan, R. J., & Francis, Sr. C. F.: *J. M. Soc. New Jersey* 57:168, 1960. (8) Rebhan, A. W., & Edwards, H. E.: *Canad. M. A. J.* 82:513, 1960.

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*Adapted from Bauer, Perry, & Kirby[1]

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JANUARY
1961

Vol. 57 No. 1

The WEST VIRGINIA Medical Journal

Official Organ of the West Virginia State Medical Association

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Member 1961

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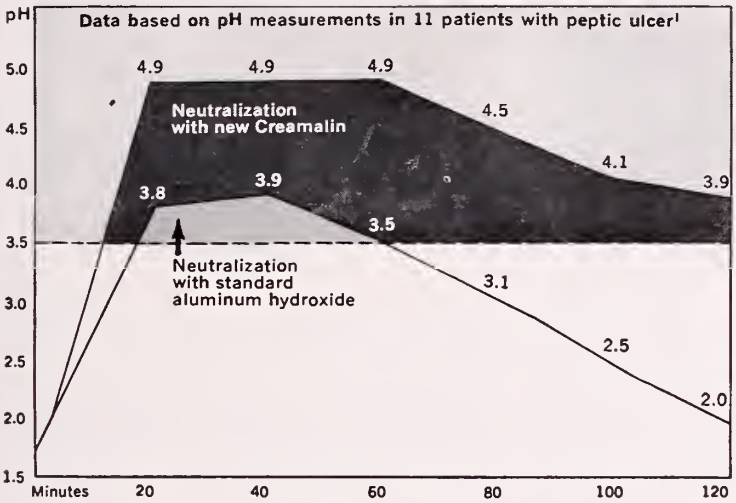

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1. Data in the files of the Department of Medical Research, Winthrop Laboratories. 2. Hinkel, E. T., Jr.; Fisher, M. P., and Tainter, M. L.: J. Am. Pharm. A. (Scient. Ed.) 48:384, July, 1959.

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WVU Medical Center
—News—

• Compiled from material furnished by John B. Harley, M. D., Assistant Professor of Medicine and Public Information Officer at the WVU Medical Center in Morgantown, W. Va.

Dr. Robert Russell Trotter of Boston, Massachusetts, has accepted appointment as Clinical Associate Professor of Surgery and Chairman of the Division of Ophthalmology at the West Virginia University School of Medicine. The announcement of his appointment was made by University President Elvis J. Stahr, Jr.

Doctor Trotter, who is a native of Morgantown, has been serving as a member of the faculty at Harvard Medical School and as a member of the staff at the Massachusetts Eye and Ear Infirmary.

He was graduated from West Virginia University and attended the two-year School of Medicine. He received his M.D. degree from the Temple University School of Medicine and served as a Fellow and as an assistant in ophthalmology at Harvard.

He is a member of the American Academy of Ophthalmology and Otolaryngology, the Massachusetts Medical Association and the American Medical Association.

Doctor Trotter is a son of the late James Russell Trotter, for many years a professor of law at the University, and a nephew of the late Frank Butler Trotter, former president of the University. His brother, Dr. John H. Trotter, is a practicing physician in Morgantown.

Clinical Instructor in Medicine Named

Another appointment announced last month was that of Dr. Louis M. Glick of Cumberland, Maryland, as Clinical Instructor in Medicine. He has been serving as a member of the faculty at the Georgetown University School of Medicine in Washington, D. C.

Doctor Glick received his M.D. degree from the Georgetown University School of Medicine and served residencies at Mercy and West Side Veterans Administration hospitals in Chicago, and during 1958-59 was chief resident in medicine at Mt. Sinai Hospital in that city. He also held teaching positions at Loyola University and the Chicago Medical School.

Lecture Series at the Medical Center

Four well-known men in the medical sciences were featured speakers at the West Virginia University Medical Lecture Series held during the fall at the Medical Center.

Dr. Herbert E. Warden, associate professor of surgery at the WVU School of Medicine, presented an illustrated lecture on "Open Heart Surgery" before the faculty, student body and guests on October 7.

On November 4, Dr. T. S. Danowski, Renziehausen professor of research medicine at the University of Pittsburgh School of Medicine, presented a paper on "Myotonia Congenita." The speaker on November 18 was Dr. Francis O. Schmitt, professor of biology at the Massachusetts Institute of Technology. His subject was "The Molecular Organization in Relation to the Function of Nerves."

Dr. K. K. Chen, director of pharmacological research at Eli Lilly and Company, was the guest speaker on December 2 and presented a paper on "The Sources of Cardiac Drugs and Their Chemistry."

Research Grants

Renewal of a National Institutes of Health grant for surgical research at the Medical Center was announced recently by University President Elvis J. Stahr, Jr. The grant, valued at $86,055 over the next three years, will support a study of "The Regulation of Electrolyte Balance in Surgery," under the direction of Dr. Bernard Zimmermann, professor and chairman of the Department of Surgery.

The major objective of the research project is the advancement of knowledge of the effects major surgery has on body chemistry. Dr. Walter H. Moran, senior resident and instructor in surgery, will assist Doctor Zimmermann in the study.

A one-year NIH grant totaling $25,000 has been awarded to Dr. Clark K. Sleeth, newly appointed dean, to support continued undergraduate training in cardiovascular physiology and disease.

Doctor Sleeth said that this marks the seventh consecutive year that grants for cardiovascular study have been received by the School of Medicine. The grants enable the School to buy equipment and supplies and to employ part-time clinical teachers to facilitate the training which otherwise would be impossible.

The National Institute of Neurological Diseases and Blindness, USPHS, has awarded a $6,797 grant to the Department of Microanatomy to support continued research on lens development and regeneration by Dr. Randall W. Reyer, associate professor of microanatomy and organology.

The grant is the fourth which has been awarded to Doctor Reyer for a study of "Induction Systems in Lens Development and Regeneration."

IN COLDS AND SINUSITIS— THE RIGHT AMOUNT OF "INNER SPACE" RIGHT AWAY

Neo-Synephrine hydrochloride relieves the boggy feeling of colds immediately and safely, without causing systemic toxicity or chemical harm to nasal membranes. Turbinates shrink, sinus ostia open, ventilation and drainage resume, and mouth-breathing is no longer necessary.

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The Month in Washington

• From the Washington Office of the American Medical Association.

PHYSICIANS are being urged to cooperate fully to get their states to participate as soon as possible in the new federal-state program for medical care of needy and the near-needy older persons. The medical profession also has been alerted to the dangers of relaxing its opposition to tying in medical care of the aged with Social Security. It is probable that the Kennedy Administration will try in 1961 to get Congressional approval of such legislation.

Dr. E. Vincent Askey, President of the American Medical Association, pointed out during the recent Washington meeting of the AMA House of Delegates that proponents of the Social Security approach had a pledge of support from the successful Democratic candidate for President.

"While our profession clearly may face a hard struggle in the 87th Congress on the issue of medical aid for the aged under Social Security, there is no ground for defeatism!" Doctor Askey said.

"Our cause is far from lost. We know that our policy position is in the best interests of all Americans, the aged included, and our willingness to defend this policy must be strengthened and maintained."

Doctor Askey reminded the House of Delegates that "medicine has many friends in both parties in Congress today."

Byrd Opposes Forand Type Legislation

A few days later, Sen. Harry F. Byrd (D., Va.), Chairman of the Senate Finance Committee which handles Social Security legislation, reiterated his opposition to a compulsory medical care plan under Social Security. He said:

"I am opposed to the (Democratic party) platform recommendation for compulsory medical service and hospitalization under the Social Security system. I am convinced this would lead to socialized medicine with the possibility that it would bankrupt the Social Security trust fund. This matter came before the Finance Committee and was fought out in the post-convention session of Congress last August. The Senate voted 51 to 44 in opposition to the Democratic platform proposal, and instead adopted a fair plan for medical service and hospitalization for those in need of it."

Doctor Askey urged that all county and state medical associations provide "the medical leadership necessary to implement the Mills-Kerr bill (the new federal-state program) as rapidly as possible." And the House of Delegates adopted such a resolution.

"We must put forth a sincere and concentrated effort during the coming year to make the Mills-Kerr law effective, to show that it can, practically as well as potentially, solve the problem of medical care for the aged," Doctor Askey said.

President-elect John F. Kennedy's first Cabinet appointment was Gov. Abraham Ribicoff of Connecticut as Secretary of Health, Education and Welfare—the official with primary responsibility for carrying out the federal part of the Mills-Kerr program.

Ribicoff, 50, was an early supporter of Kennedy for the Presidential nomination. He was twice elected governor of Connecticut. Before that, he served as a police judge in Hartford, Connecticut, a member of the state legislature and a member of the U. S. House of Representatives. As governor, he inaugurated a comprehensive traffic safety program with strong penalties.

Miscellaneous

The Sabin oral polio vaccine will not be available in sufficient quantity in 1961 for large scale use. Dr. Leroy E. Burney, Surgeon General of the U. S. Public Health Service, said at the AMA Clinical Meeting that many problems involved in taking the oral vaccine out of the laboratory and into mass production had not been solved.

In light of this fact, both the AMA House of Delegates and Doctor Burney urged that the widest possible use of the Salk vaccine be encouraged. Doctor Burney said that large numbers of the U. S. population, including almost half of the children under five, had not been fully vaccinated with the effective Salk vaccine.

He said the problems of integrating the oral vaccine into the present program of immunization against polio "are many and complex."

The Food and Drug Administration issued stricter rules, some effective January 8 and others effective March 9, governing promotion and marketing of prescription drugs. The new regulations are designed to insure safe use of the drugs.

Under the new regulations, manufacturers must disclose hazards, as well as advantages, of the drugs in promotional material sent to physicians. Manufacturers can be denied permission to market drugs if they refuse to permit FDA inspection of manufacturing methods, facilities, controls or records.

Obituaries

ROBERT E. DAVIS, M. D.

Dr. Robert E. Davis, 71, of Parkersburg, died at his home in that city on December 6, following a long illness.

Doctor Davis was born at Leroy, Wirt County, June 13, 1889, son of the late A. D. and Nancy (Orr) Davis.

He received his M. D. degree from Loyola University of Chicago in 1914 and was licensed to practice in West Virginia that same year, locating at Junior in Barbour County. He also practiced at Nitro before moving to Parkersburg in 1920.

Besides his widow, he is survived by two brothers, Harvey Davis of Columbus, Ohio, and L. C. Davis of Vienna; and five sisters, Mrs. Bertha Smith of Vienna, Mrs. Lucy Full of Parkersburg, Mrs. Florence King of Sunbury, Pennsylvania, Mrs. Fanny Simmons of Lakeside, California, and Mrs. Gretta Brotton of Apple Creek, Ohio.

WALTON L. STROTHER, M. D.

Dr. Walton L. Strother, 86, of Salem, died in a hospital in Clarksburg on December 15, 1960, where he had been a patient for several months.

Doctor Strother was born on Katy Lick in Harrison County on June 6, 1874, son of the late John J. and Elmyra (Fittro) Strother.

He received his medical education at the University of Maryland School of Medicine in Baltimore, and was licensed to practice medicine in West Virginia in 1900. He located at Salem where he continued in active practice until his retirement in 1953 because of ill health.

In 1912, he married Miss Helen M. Boughner, who died on December 25, 1955.

He was an honorary member of the Harrison County Medical Society, the West Virginia State Medical Association and the American Medical Association.

He is survived by a foster son, Major Duncan S. Boughner, USA, El Paso, Texas.

Fulfillment of Physician Responsibility

The responsibility of the physician must be fulfilled in the realm of the non-partisan and the non-sectarian. Political and religious prejudice must not be permitted to enter the operating room, the hospital room or any phase of the physician's activities.

That is why we must never have socialized medicine. The moment the doctor becomes a pawn in the hands of the politician, he becomes by force of circumstance a political ward heeler and a policyman.—E. D. Sorenson, M. D., in Wisconsin Medical Journal.

It is easier to appear worthy of the office one does not hold than of that which one does.—La Rochefoucauld.

OFFICERS OF COUNTY AUXILIARIES

Society	President		Correspondent	
Boone	Mrs. O. D. MacCallum	Madison	Mrs. Wyson Curry	Madison
Cabell	Mrs. C. H. Boso	Huntington	Mrs. J. A. Heckman	Huntington
Central West Virginia	Mrs. Elden H. Pertz	Weston	Mrs. O. W. Corder	Weston
Eastern Panhandle	Mrs. C. V. Townsend	Mortinsburg	Mrs. L. Walter Fix	Martinsburg
Fayette	Mrs. T. C. Sims	Montgomery	Mrs. I. A. Bush	Oak Hill
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Hancock	Mrs. Roy G. Conrad	Weirton	Mrs. Eli Weller	Weirton
Harrison	Mrs. Herman Fischer	Bridgeport	Mrs. Paul E. Gordon	Clarksburg
Kanawha	Mrs. J. A. B. Holt	Charleston	Mrs. Benjamin Newman	Charleston
Logan	Mrs. R. M. Kessel	Logan	Mrs. Henry Bobroff	Man
Marion	Mrs. John D. Lindsay, Jr.	Fairmont	Mrs. John Coogle	Fairmont
McDowell	Mrs. H. A. Bracey	Welch	Mrs. J. H. Smith	Welch
Mercer	Mrs. R. R. Raub	Bluefield	Mrs. W. F. Hillier	Bluefield
Mingo	Mrs. W. H. Price	Williamson	Mrs. Robert Tchou	Williamson
Monongalia	Mrs. Clement A. Smith	Morgantown	Mrs. Maynard Pride	Morgantown
Ohio	Mrs. Robert T. Bandi	Wheeling	Mrs. Andrew H. Barger	Wheeling
Potomac Valley	Mrs. Harry Coffman	Keyser	Mrs. George M. Solan	Romney
Preston	Mrs. John Trenton	Kingwood	Mrs. John Trenton	Kingwood
Raleigh	Mrs. Sherl Winter	Beckley	Mrs. James M. Caram	Beckley
Summers	Mrs. Jack D. Woodrum	Hinton	Mrs. D. W. Ritter	Hinton
Taylor	Mrs. H. N. Shanes	Grafton	Mrs. Paul P. Warden	Grafton
Wood	Mrs. Charles H. Barnett	Parkersburg	Mrs. David Thornburgh	Parkersburg
Wyoming	Mrs. Mario Cardenas	Mullens	Mrs. Samuel Santa Rita	Mullens

County Societies

BARBOUR-RANDOLPH-TUCKER

Dr. G. W. H. Schepers was the guest speaker at the regular monthly meeting of the Barbour-Randolph-Tucker Medical Society, which was held at the Elks Country Club in Elkins on November 17. His subject was "Pulmonary Pathology."

The speaker discussed a multitude of pulmonary diseases, illustrating his talk with slides which showed both gross and microscopic specimens. He emphasized that we are exposed to many hazards in the atmosphere which cause pulmonary pathology. He also stated that a number of these conditions go unrecognized for a long period of time because x-rays and in some cases advanced pathology do not show in the early stages. He brought out the interesting fact that BCG vaccine given to a patient with silicosis will produce tuberculosis. A question and answer period followed the presentation of the paper.

Dr. John L. Rittmeyer, the vice president, presided at the business meeting following the scientific program. Reports concerning the proposed Medical Examiner's Bill and the possibility of reorganization of the Auxiliary were presented. The Society later voted to approve the reorganization of the Auxiliary.—Charles L. Leonard, M. D., Secretary.

CABELL

Reports of chairmen of several committees were submitted at the regular monthly dinner meeting of the Cabell County Medical Society, held in the Georgian Terrace at the Hotel Frederick in Huntington on November 10.

Dr. Chauncey B. Wright presented a detailed report concerning the recent meeting of the West Virginia Cancer Society in Charleston. He said that the Society had decided to promote a project suggested by Dr. Hu C. Myers of Philippi that would make the physician's office the first line of defense against cancer. It is proposed to publish in the various communities of the state lists of physicians who agree to participate in the cancer detection program. Field workers will publicize the program through the means of motion pictures and the distribution of pamphlets. The Society went on record as approving the project.

An interim report on the new program for medical aid for the aged was given by Dr. James S. Klumpp, chairman of the State Medical Economics Committee. Dr. Charles A. Hoffman discussed the Kerr-Mills bill which is designed to apportion federal funds to the states on the basis of the 1959 income, 78 per cent federal funds, and 22 per cent state funds. A resolution offered by Doctor Hoffman concerning the MAA program was adopted.

The president, Dr. I. Ewen Taylor, presided at the meeting, which was attended by 47 members.—W. L. Neal, M. D., Secretary.

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HARRISON

Dr. A. R. Marks of Clarksburg was the guest speaker before the regular monthly dinner meeting of the Harrison County Medical Society held at the Stonewall Jackson Hotel in Clarksburg on December 1. His subject was "Drug Intoxication in Children."

At the business meeting following the scientific program, Dr. James A. Thompson submitted a report concerning the work of the Committee on Diabetes during "Diabetes Week," describing the work of the Junior Woman's Club of Bridgeport in this particular project. He said that there were 400 urinalyses, and that four undetected cases of diabetes were discovered.

Dr. Richard V. Lynch, Jr., discussed the meeting of the Council of the State Medical Association at Charleston on November 13. He said that a substantial increase in the appropriations in the budget of the State Department of Health is being sought for the ensuing year. There was a lengthy discussion of the problems presented by the new MAA program as well as resolutions on the subject which were presented to the Council.—Andrew J. Weaver, M. D., Secretary.

* * * *

McDOWELL

Dr. J. Hunter Smith of Welch was the guest speaker at the regular monthly meeting of the McDowell County Medical Society which was held at the Stevens Clinic Hospital in Welch on November 16. He presented a paper on "Conservative Treatment of Low Back Pain."

Dr. Guy E. Irvin, the president, presided at the business meeting. Dr. J. Howard Anderson, chairman of the Medical Economics Committee, presented two resolutions concerning the Department of Public Assistance which were approved by the Society following discussion by several members.

Reports were also presented concerning problems of the coroner's office and the Civil Defense Program in McDowell County.—George L. Fischer, M.D., Secretary.

* * * *

MERCER

The regular monthly meeting of the Mercer County Medical Society was held at the West Virginian Hotel in Bluefield on November 21. Dr. Henry F. Warden, Jr., the vice president, presided at the dinner meeting which was preceded by a social hour.

The guest speaker was Mr. Leslie W. Dalton, Jr., who presented an interesting talk on speech and hearing problems and activities of the speech pathologist and audiologist in the average community. He also discussed the diagnosis and management of various speech and hearing problems.

Dr. Sam Milchin presented a report on behalf of the nursing home committee and stated that the committee had met with representatives of the Chamber of Commerce to explore the possibility of purchasing or building a nursing home in the Bluefield area.

Dr. L. J. Pace, a member of the Council of the State Medical Association, presented a report on a meeting

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Charles H. Hiles, M. D.
Albert M. Valentine, M. D.
James A. Jacob, Jr., M. D.

Neurology and Psychiatry:
Albert L. Wanner, M. D.

Roentgenology:
William K. Kalbfleisch, M. D.

Clinical Laboratories:
Barbara Karrer, M. T.

Technologists:
Electrocardiology:
Joan Vensel, R. N.
Electroencephalography:
JoAnn Hastings
Roentgenology:
Evelyn Forester, R. T.

Business Administration:
John H. Clark, Manager
Lester L. Cline, Ass't. Bus. Mgr.

of that group which was held in Charleston on November 13.— John J. Mahood, M.D., Secretary.

* * * *

RALEIGH

At the regular monthly dinner meeting of the Raleigh County Medical Society held at the Beckley Hotel on Thursday evening, November 17, the following officers were elected to serve during 1961:

President elect, Dr. John A. Hedrick; secretary-treasurer, Dr. Thomas L. Martin; delegates to the House of Delegates, Drs. Warren D. Elliott and John J. Marra; alternates, Drs. F. Vivan Lilly, Forest A. Cornwell, J. A. Vermeeren and Richard G. Starr.

Dr. Charles W. Merritt was named a member of the board of censors and Drs. Wallace B. Lilly and W. W. McKinney were named members of the program committee.

Dr. Harry F. Cooper, who has served as president elect during the past year, succeeds Dr. F. Vivan Lilly as president. He will serve during 1961.

Dr. John E. McKenzie and Dr. T. F. Garrett were elected to honorary membership in the Society.

The president, Doctor Lilly, presided at the meeting which was attended by 42 members.—Preston C. Davis, M.D., Secretary.

One man gets only a week's value out of a year while another man gets a full year's value out of a week.—Charles Richards.

Changes in Medical Education

Each generation of medical students develops in a different world as it were. Medical science has made tremendous advances even for those who have been out of medical school only a decade or two. To each successive generation that goes through our medical schools the same general principles of change and progress will continue to apply.

One of the changes that has taken place in medical education within recent years has been in the students themselves. They are somewhat older, more serious minded and are constantly pressing forward toward their goal. The number of married students in medicine has been one of the notable changes during the past twelve or fifteen years. From three to sixteen per cent of first year students are now married when they enter medical school. Not infrequently the wife of a married student makes an important financial contribution to the family maintenance during the medical school and interne or residency period.

As a class progresses through the four years of the medical course, there is each year a larger percentage of married students, until by the time the fourth year is reached as many as 75 or 80 per cent of the class may be married. Fifty years ago, hardly more than one or two men in each class were married.—Ralph C. Williams, M. D., in Journal, Med. Assn. State of Alabama.

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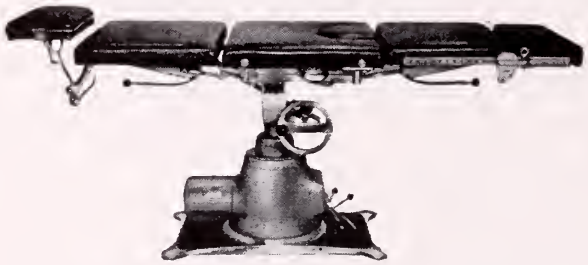

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Treasurer: Mrs. Andrew J. Weaver, Clarksburg
Recording Secretary: Mrs. Rupert W. Powell, Fairmont
Corresponding Secretary: Mrs. C. A. Smith, Morgantown
Parliamentarian: Mrs. Claude R. Davisson, Weston

HARRISON

A dinner meeting of the Woman's Auxiliary to the Harrison County Medical Society was held at the Stonewall Jackson Hotel in Clarksburg on December 1. Mrs. Herman Fischer, the president, presided at the meeting.

A program of Christmas music was presented by the sixth grade chorus of Morgan School. Mrs. C. S. Harrison was in charge of arrangements for the program.

Hostesses were Mesdames John D. H. Wilson and L. B. Thrush.—Mrs. Paul E. Gordon, Secretary.

MINGO

The regular monthly meeting of the Woman's Auxiliary to the Mingo County Medical Society was held at the home of Dr. and Mrs. J. E. Johnson in South Williamson, Kentucky, on December 1. Mrs. W. H. Price, the president, presided at the meeting which was attended by 14 members.

Mrs. S. G. Zando presented an interesting talk concerning the nursing profession, and several reports were given during the ensuing business session. The Auxiliary also made a contribution to the Clothes Closet, a local endeavor.

Hostesses for the meeting were Mesdames J. E. Johnson and W. W. Scott.—Mrs. Robert J. Tchou, Secretary.

* * * *

PARKERSBURG ACADEMY OF MEDICINE

The regular monthly meeting of the Woman's Auxiliary to the Parkersburg Academy of Medicine was held at the Chancellor Hotel in Parkersburg on November 9. Mrs. Charles H. Barnett, the president, presided at the luncheon meeting.

The guest speakers were Miss Marjorie Grandon, associate director of the St. Joseph's School of Nursing, and Mrs. William Gracey, instructor of medical and surgical nursing at Camden-Clark School of Nursing.

Miss Grandon emphasized the importance of recruting student nurses and stated that nursing personnel must increase in ratio to the population increase. She said there should be 300 registered nurses

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per 100,000 population. She also expressed appreciation for the recreational fund sponsored by the Auxiliary.

Mrs. Gracey outlined a proposed postgraduate scholarship fund for nurses at Camden-Clark Hospital. She said the fund would enable graduates with potential for supervisory and head nurse positions to take postgraduate work in administration and clinical supervision.

Hostesses for the meeting were Mesdames Richard B. Sheridan, Ralph H. Boice, Robert D. Crooks, William M. Hall and James L. Wade.—Mrs. David B. Thornburgh, Chairman, Press and Publicity.

Resistance Key to Longevity?

Heredity plays a role in the process of aging, and gives clues to the resistance to disease. Resistance may be the secret to longevity. It determines the life span of certain individuals.

Resistance to disease may be acquired or inherited. The acquired type comes as a result of exposure, either naturally or by vaccination to a specific disease-producing organism. The inherited type is an inborn resistance which gives the individual a high degree of resistance against infectious and non-infectious diseases. It appears to be part of the individual's constitutional makeup transmitted by heredity. This general inborn resistance seems to protect the individual against both infectious and degenerative diseases. It also determines the length of his life span by slowing down the rate of the aging process.—Ulysses M. Frank, M. D., in Journal, Med. Soc., New Jersey.

Mental Changes in the Aging

The doctor's role in treating older people is perhaps more of a two-fold one than is usual in medical practice with younger adults. It is similar to that of the pediatrician in that he will be expected not only to treat various things gone wrong with the aging person but also to perform an important preventive function.

In pediatrics, prevention is geared to promotion of good nutrition, avoidance of severe contagious diseases, and protection of the child so he can develop physically, mentally and emotionally in a normal way. With the aged person it also includes maintaining proper nutrition as well as preventing accidents which might result in long periods of crippling, slowing down deteriorative processes as much as possible, and preventing the development of unhealthy emotional patterns.—James N. Sussex, M. D., in Journal, Med. Assn., State of Alabama.

Science provides the understanding of the universe in which we live. Mathematics provides the dies by which science is molded. Our world is to a large extent what mathematics says it is. This body of man-made abstractions, this practical tool, model of all intellectual enterprises, and essence of our knowledge of nature leads through science to man himself.—Morris Kline.

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Book Reviews

DISEASES OF THE NEWBORN — By Alex J. Schaffer, M. D., Associate Professor of Pediatrics, The Johns Hopkins Medical School, Baltimore, with a Section on Neonatal Cardiology by Milton Markowitz, M. D., Assistant Professor of Pediatrics at Johns Hopkins. Pp. 878, with numerous illustrations. Philadelphia & London: W. B. Saunders Company. 1960. Price $20.00.

Seldom does a new book fill the need which the author thinks it should; Doctor Schaffer's book is a welcome exception. This book is well planned and executed to help those who supervise "the growth and development of infants and children to become more adept in diagnosis, therapy and prevention of the disorders of the newborn infant."

On hundred fourteen chapters and four appendices are included in the book. Theoretical and practical matters are discussed, but the emphasis seems to be on the pragmatic. Recommendations for treatment are spelled out in simple, practical terms.

The format of the book is pleasing; the type is well-spaced and easy to read. There are two columns per page. Many illustrations and case histories enliven the book. The case histories are followed by comments which include opinions about the variation of the particular from the average.

This book is so good that I hesitate to point out the few criticisms that I have. In chapter 105, "Nevi and Tumors of the Skin," there is a rather forceful recommendation for treatment of elevated angiomas with irradiation or surgical excision. It is difficult to gainsay the use of drastic treatment in the handling of thrombocytopenic purpura with giant hemangioma as discussed on page 537; however, the presence of only eleven such cases in the literature does not seem to justify this warning on page 765: "For very large ones, in view of the danger of thrombocytopenic purpura, one has to recommend some form of treatment. X-irradiation is probably the safest and most effective, although surgical excision, in the proper hands, is highly satisfactory." My own opinion would be more conservative. (Cf. Lampe, I., and Latourette, H.B.: Pediat. Clin. North America 6:511-528, 1959).

Some other important subjects, such as supernumerary digits, club foot, neonatal tetany, and dysautonomia, have been inadvertently omitted.

It seems advisable to read chapter 70, "Hemolytic Disease of the Newborn," before applying "A Plan for the Management of Newborn Infants with Suspected Erythroblastosis," (Appendix III); the chapter includes some variations of management not clearly indicated in the appendix.

This book was one of the few new medical textbooks which needed writing. I recommend it highly to all who treat newborns.—Donald M. Burke, M.D.

* * * *

COMPLICATIONS IN SURGERY AND THEIR MANAGEMENT.—Edited by Curtis P. Artz, M. D., F.A.C.S., Associate Professor of Surgery, and James D. Hardy, M. D., F.A.C.S., Professor and Chairman of the Department of Surgery, University of Mississippi School of Medicine, Jackson, with contributions by 69 authorities. Pp. 1075, with numerous illustrations. Philadelphia and London: W. B. Saunders and Company. 1960. Price $23.00.

This is a unique book. It is devoted to the description of the management and prevention of various complications that may arise during the course of treatment of a wide variety of surgical problems. It was edited and partly written by two surgeons who are active in teaching and research. The editors have carefully chosen 69 contributors, each of whom is an authority on the subject which he discusses. The contributors for the most part are also teachers of surgery and ones who have participated in research on the problems of their assigned topics.

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The explanations are lucid and the illustrations clear. The emphasis is on surgical physiology and general principles rather than on errors in technique, although the common errors are not neglected.

The 1075 pages of the book are divided into 57 chapters which are further subdivided into the necessary parts to cover each subject well. The arrangement is logical and the material can be found easily, either by reference to the comprehensive index or by leafing through the pages of the pertinent chapters. The subject matter covers almost all phases of general surgery and the common operations in the special fields of surgery which are frequently carried out by general surgeons.

The book is essentially a reference text which will be found helpful to several groups of surgeons: (1) to the surgical resident who is learning a procedure and who needs to become cognizant of the pitfalls in that particular type of treatment; (2) to the general surgeon who is about to attack a problem which is unusual to him; (3) to the surgical specialist who needs help in the general problems of surgical management; and, (4) to any surgeon who encounters an unusual complication or one which is uncommon in his particular practice.

The authors are to be commended for thinking of this unusual approach to the varied problems of surgery and for successfully compiling, editing and unifying material of much diversity.—Hu C. Myers, M.D.

* * * *

EDEMA—Mechanisms and Management—A Hahnemann Symposium on Salt and Water Retention. Edited by John H. Moyer, M. D., Professor and Chairman of the Department of Medicine, and Morton Fuchs, M. D., Assistant Professor of Medicine, Hahnemann Medical College and Hospital, Philadelphia. Pp. 833, with illustrations. Philadelphia & London: W. B. Saunders and Company. 1960. Price $15.00.

This symposium by more than 100 authors is a review of the mechanisms and management of edema. The authors include internists, pediatricians, surgeons, obstetricians, pharmacologists, physiologists, and biochemists.

The symposium is presented in three parts. The first sections deals with basic physiology as it applies to the mechanisms of edema. The second is devoted to the pharmacology of the diuretic agents. The third deals with clinical syndromes associated with edema.

The symposium is quite comprehensive. Its charts, graphs, illustrations and bibliography are excellent.

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The quality of the article varies from trite to excellent. The handiwork of an effective editor seems lacking.

Despite these mild criticisms, this comprehensive volume should be available to all physicians who treat edematous patients.—Harry A. Jackson, M. D.

* * * *

Books Received

PROGRESS IN THE TREATMENT OF FRACTURES AND DISLOCATIONS, 1950-1960.—By Thomas B. Quigley, M. D., Assistant Clinical Professor of Surgery, Harvard Medical School, and Surgeon, Peter Bent Brigham Hospital, and Henry Banks, M. D., Clinical Associate in Orthopedic Surgery at Harvard, and Associate in Orthopedic Surgery at the Peter Bent Brigham Hospital. Pp. 102. Philadelphia and London: W. B. Saunders Company. 1960. Price $2.50.

* * * *

OUTLINE OF PATHOLOGY—By John H. Manhold, Jr., D.M.A., M.A., F.A.C.D., Professor and Director of Oral Dentistry and Pathology, College of Dentistry, Seton Hall College of Medical and Dentistry, Jersey City Medical Center; and Theodore E. Bolden, D.D.S., M.S., Ph.D., Assistant Professor of Oral Diagnosis and Pathology at Seton Hall, and attending pathologist, Jersey City Medical Center. Pp. 340. Philadelphia and London: W. B. Saunders Company. 1960. Price $4.75.

* * * *

OCCUPATIONAL DISEASES AND INDUSTRIAL MEDICINE—By Rutherford T. Johnstone, M. D., Consultant in Industrial Medicine, Clinical Professor of Preventive Medicine and Public Health and Clinical Professor of Medicine, University of California at Los Angeles; and Seward E. Miller, M. D., Director, Institute of Industrial Health, Professor of Medicine, Medical School Professor of Industrial Health, School of Public Health, University of Michigan, Ann Arbor. Pp. 482 with illustrations. Philadelphia and London: W. B. Saunders Company. 1960. Price $12.00.

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E. E. MYERS, M. D.

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HU C. MYERS, M. D.
A. KYLE BUSH, M. D.

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RAYMOND W. CRONLUND, M. D.

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WVU Medical Center
–News–

• Compiled from material furnished by John B. Harley, M. D., Assistant Professor of Medicine and Public Information Officer at the WVU Medical Center in Morgantown, W. Va.

Dr. Barbara Jones of St. Louis, Missouri, has accepted appointment as Assistant Professor of Pediatrics at the West Virginia University School of Medicine. She assumed her new duties at the Medical Center late last month.

Doctor Jones was graduated from Stanford University and received her M. D. degree from the University of Utah College of Medicine in 1952. She served an internship and residency at St. Louis Children's Hospital and then joined the faculty at the Washington University School of Medicine in 1955.

She has been active in research and is co-author of numerous articles published in professional journals. She is certified by the American Board of Pediatrics and holds membership in the American Academy of Pediatrics, the St. Louis Pediatric Society, the New York Academy of Science and the American Society of Hematology.

Doctor Jones will work with Dr. William C. Klingberg, Professor and Chairman of the Department of Pediatrics, who also was a colleague at Washington University.

MEND Contract Renewed

Dr. Clark K. Sleeth, Dean of the School of Medicine, has announced that the School's contract with the Medical Education for National Defense program has been renewed. The school became eligible to participate in MEND in 1959 upon achieving the status of a four-year medical school.

Dr. Daniel T. Watts, Professor and Chairman of the Department of Pharmacology and coordinator of the program at the University, said the purpose of the program is incorporation of significant aspects of military and disaster medicine into the school's curriculum.

University faculty members attended MEND symposia throughout the country last year. Expenses of the personnel attending these conferences are paid by the Federal government, as are those of visiting lecturers at the University.

Internship Program Approved

Dr. Kenneth E. Penrod, vice president-medical affairs, announced recently that the School of Medicine's proposed internship program has been approved by the AMA Council on Medical Education and Hospitals. Fourteen internships will become available on July 1, 1961.

Doctor Penrod said graduates of any medical school in the United States or Canada will be eligible to apply. He pointed out that the approval of internships constitutes the third step in the University's medical education program. Already in progress is the education of medical students for a full four years and the training of residents in various specialties.

He termed the AMA committee's action "very encouraging," pointing out that unconditional approval of an internship program usually is not given a new hospital until it has been in operation for at least a year. The University Hospital admitted its first patient on August 10, 1960.

Miscellaneous

Dr. Sobisca S. Hall of Clarksburg, a past president of the State Medical Association, recently gave the School of Medicine more than $3,700 worth of laboratory equipment, furniture and apparatus. The gift includes approximately $3,000 worth of x-ray equipment, together with a wide variety of equipment and furniture from Doctor Hall's recently discontinued laboratory in Clarksburg.

Last spring, he contributed a $1,600 nasopharyngeal applicator which uses a radium element to treat cancer of the nose and throat. The instrument is currently being used in the Department of Surgery.

The WVU Hospital has been designated a "respirator center" by the National Foundation, and several respirators and related equipment items have been shipped to the Medical Center.

The equipment was moved to the Hospital at the time of a recent outbreak of polio in nearby Preston County. The availability of the equipment was made possible through a program developed several years ago by the National Foundation in cooperation with state hospitals, fire departments and other agencies which owned respiratory and orthopedic equipment.

The National Institutes of Health, USPHS, has awarded a $8,108 grant to the School of Medicine to finance a study entitled "Effect of Vitamin A on Serum Lipids" by Dr. R. F. Krause, Professor and Chairman of the Department of Biochemistry. He is working on a similar research project under a $5,600 grant from the West Virginia Heart Association.

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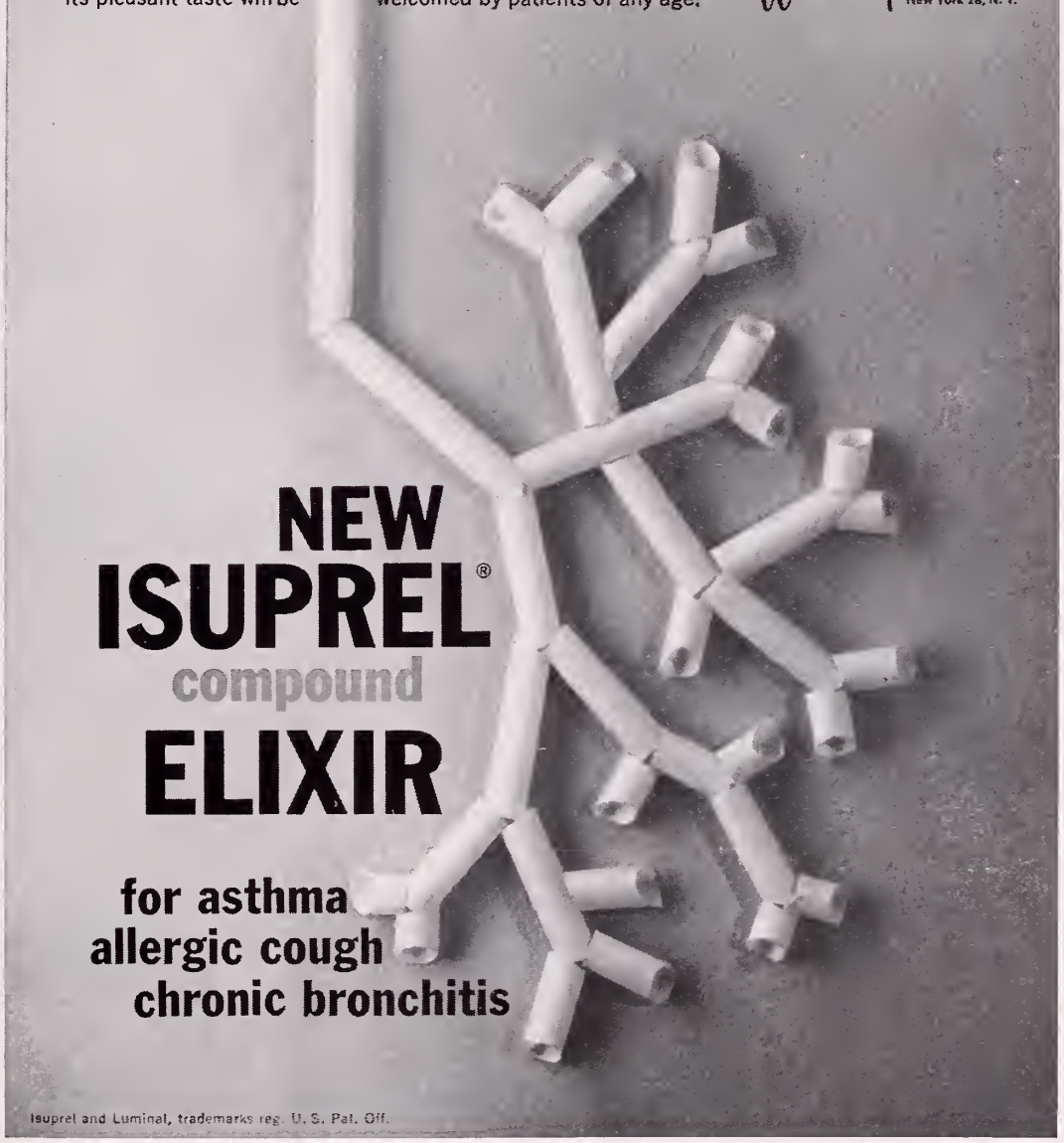

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The Month in Washington

SPOKESMEN for the medical profession at the White House Conference on Aging supported the Kerr-Mills voluntary program for health care of elderly persons as an efficient, economical way to furnish assistance to those who need help. Leading physician delegates to the Conference also continued vigorous opposition to the Social Security approach espoused by organized labor.

Continuing their all-out campaign for the Social Security approach, labor union leaders used the Conference as a forum for further attacks on the medical profession.

Dr. J. Lafe Ludwig of Los Angeles, Chairman of the American Medical Association's Council on Medical Service, told a pre-conference meeting of the physician delegates that it would be a "national tragedy—unfair to old and young alike—if the Kerr-Mills law should be shelved for a Social Security plan for medical care of the aged.

"Federal medicine would mean red tape, bureaucratic control, and high costs," Doctor Ludwig said. "Most important of all, it would mean inferior medical care for the people whom we are trying to help."

Describing the Kerr-Mills law as a "historic milestone," Doctor Ludwig said the "overwhelming majority" of the nation's physicians believe it is "an excellent law which can and will work and deserves every opportunity to do so."

Dr. Leonard W. Larson of Bismarck, North Dakota, president elect of the AMA, told the Conference's Health and Medical Care Section that more attention must be given to keeping older persons healthy. He was chairman of the section.

"We spend millions of dollars and hours developing sound, well-based programs for care of the sick, but at the same time we virtually ignore the vast opportunities for preservation and promotion of health," Doctor Larson said.

"We must do more than react to the minority of older persons who are ill—we must act for the great majority who are well."

In a statement issued in Chicago, Dr. E. Vincent Askey of Los Angeles, President of AMA, branded as false an allegation that the White House Conference had been "captured" by organized medicine, private insurance and business interests. Doctor Askey specifically referred to such a charge made by Prof. Wilbur J. Cohen of the University of Michigan, but the AMA president's statement applied to similar charges made by representatives of organized labor.

• **From the Washington Office of the American Medical Association.**

Doctor Askey implied that, "if anyone has a legitimate complaint regarding the choice of personnel directing the activities" of the key section on income maintenance, it was opponents of the Social Security approach.

Doctor Ludwig also answered organized labor's attacks on the AMA at the Conference. Doctor Ludwig accused George Meany, president of the AFL-CIO, of "attempting to undermine" the Conference to "further his own partisan interests."

"Meany obviously is prepared to go to any extreme to impugn the motives of those who disagree with him," Doctor Ludwig said. "Delegates to this conference representing medicine and many other groups came here in a spirit of cooperation determined to take realistic action to help the elder citizens of this country."

Doctor Ludwig said that some labor leaders "obviously are more interested in saddling the people of this country with a system of socialized medicine" than they are in "helping those older people who really need help."

"Of the 30 states making specific recommendations regarding financing of medical care for the aged, only 10 favored the Social Security tax."

President Eisenhower urged the 2,700 delegates to the Conference to reconcile their differing views and agree on a sound program. He told the delegates it was their responsibility to provide "some kind of guidance for Congress to use in its future deliberations."

President John F. Kennedy declined an invitation to address the Conference as President elect. He and Congressional Democratic leaders decided weeks before the Conference to make medical care for the aged under Social Security an Administration priority bill for early submission to Congress.

But some key Democrats in Congress announced they would not go along with President Kennedy on the issue. Sen. Robert S. Kerr (D., Okla.), co-author of the medical-care-for-the-aged program approved by Congress last year, said it should be financed by a general tax—"not a limited tax like Social Security."

Obituaries

HENRY C. DAVIS, M. D.

Dr. Henry C. Davis, 58, of Bluefield, died on December 18, 1960, following a brief illness.

Doctor Davis was born at Honaker, Virginia, son of the late William and Alice (Artrip) Davis, January 30, 1902. He received his academic education at the University of Louisville and was graduated from the Medical College of Virginia in 1937.

Prior to locating for general practice at Bluefield, he engaged in general practice at Grundy and in Bluefield, Virginia. He had served for several years as a member of the staff of St. Luke's Hospital in his home city.

During World War II, he served with the 232nd General Hospital in the Pacific Theater, being released with the rank of Major.

He was a member of the Mercer County Medical Society, the West Virginia State Medical Association and the American Medical Association.

Besides his widow, he is survived by a daughter, Mrs. Phyllis Guerin, and a son, Henry C. Davis, Jr., of Bluefield, Virginia; three sisters, Mrs. Mildred Johnson and Mrs. James Albert of Beverly Hills, California, and Mrs. W. W. Taylor of Winstead, Connecticut; and a brother, Thomas Davis of Honaker.

DAVID FRENCH PAULEY, M. D.

Dr. David French Pauley, 88, of Jeffrey (Boone County), died in a hospital in Madison on January 13, 1961. Death followed an illness of several months' duration.

Doctor Pauley had part of his medical education at the Cincinnati College of Medicine and Surgery, and received his M. D. degree from the University of Louisville School of Medicine in 1898. He was licensed to practice in West Virginia that same year and located at Madison, subsequently moving to Jeffrey, where he engaged in general and industrial practice for more than sixty years. He was a teacher in the public schools in Boone County prior to enrolling in medical school.

He was an honorary member of the Boone County Medical Society, the West Virginia State Medical Association and the American Medical Association.

Besides his widow, he is survived by two daughters, Mrs. Grace Winkelvoss of Charleston and Mrs. Thelma Cook at home; two sons, Clarence E. and David French, Jr., at home; one stepson, Van Buren Miller of Jeffrey; and a sister, Mrs. Laura Ball of Turtle Creek.

* * * *

JAMES MARSHALL SKINNER, JR., M. D.

Dr. James Marshall Skinner, Jr., 60, of New Martinsville, died at a hospital in that city on December 21, 1960.

Doctor Skinner was born in New Martinsville on August 4, 1900, son of the late Dr. James and Minerva (Bucher) Skinner. He had his academic education at

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West Virginia University and received his M. D. degree from the University of Tennessee College of Medicine in 1924. He interned at Memphis General Hospital, 1924-25, and served a residency at that hospital, 1926-27.

After serving for several years as industrial physician for the Powhatan Mining Company, he retired in 1951 and resided in New Martinsville until his death.

He served with the Armed Forces during World War I.

Doctor Skinner was an honorary member of the Wetzel County Medical Society, the West Virginia State Medical Association and the American Medical Association.

Besides his widow, he is survived by a brother who is located in Chile.

* * * *

HAROLD E. TROUP, M. D.

Dr. Harold E. Troup, 53, of Bluefield, died at his home in that city on January 3, 1961, following a short illness.

Doctor Troup was born in Pittsburgh, Pennsylvania, April 6, 1907, son of Mrs. Myrtle M. Troup of Pittsburgh and the late Charles B. Troup. He received his B. S. degree from the University of Pittsburgh in 1929, M. S. degree from the University of Alabama in 1932, and his M. D. degree from the University of Louisville School of Medicine in 1935. He served his internship at Norton Infirmary in Louisville, 1935-36, and had a year's training in neuropsychiatry with the Veterans Administration, 1939. He was licensed to practice in West Virginia in 1945.

For the past ten years, Doctor Troup has served as medical examiner for the Norfolk and Western Railway with headquarters in Bluefield. Previously he had been located at Portsmouth, Ohio. His private practice of his specialty of neuropsychiatry in Bluefield had been limited to consultations.

He was a member of the Mercer County Medical Society, the West Virginia State Medical Association and the American Medical Association.

Besides his widow, he is survived by a daughter, Mary K. Troup, a student at a school in Atlanta, Georgia; and a son, Charles W. Troup, who is a student at Emory and Henry College, in Emory, Virginia.

* * * *

COY TILLMAN UPCHURCH, M. D.

Dr. Coy Tillman Upchurch, 61, of Oceana, died on December 20, 1960, at a hospital in Beckley. Death was attributed to a heart attack.

Doctor Upchurch was born January 10, 1899, at Apex, North Carolina, son of the late Henry and Reda (Howell) Upchurch. He graduated with the degree of B.A. from Wake Forest College in 1922 and received his M.D. degree from the Medical College of Virginia in 1924. He interned at the MCV Hospital, 1924-25, and was licensed to practice in West Virginia in 1926. He served as a resident at the Mt. State Hospital in Charleston, 1931-32.

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In May, 1932, he accepted appointment as industrial physician for the Koppers Coal Company at Beards Fork and also engaged in industrial practice at Powellton and at Melcraft, Pennsylvania. He moved to Kopperstown in April, 1940, to serve as physician for the coal operation there. For the past several years, he had been engaged in private practice at Oceana.

He was a member of the Wyoming County Medical Society, the West Virginia State Medical Association and the American Medical Association. He served as president of his local Society, 1948-49.

Besides his widow, he is survived by a daughter, Miss Marian Upchurch of Chicago, Illinois; a son, Louis Upchurch of Oceana; and four sisters, Mrs. L. O. Branch of Durham, North Carolina, Mrs. William Espey of Dallas, Texas, Mrs. Duma Bledsoe of Raleigh, North Carolina, and Mrs. Catherine Koral of Syracuse, New York.

* * * *

JAMES LOWRANCE WADE, M. D.

Dr. James Lowrance Wade, 54, of Parkersburg, died at his home in that city, on January 4, 1961, following a heart attack.

Doctor Wade was born in Parkersburg on March 1, 1906, son of the late James S. and Ann (Lowrance) Wade. He received his early education in the public schools of Parkersburg and at Kiski Preparatory School at Saltsburg, Pennsylvania. He graduated from West Virginia University in 1928 and received his M. D. degree from Jefferson Medical College in Philadelphia in 1932.

He served his internship at Pennsylvania Hospital in Philadelphia, 1932-34, and a residency at Mayo Clinic 1934-36. He was licensed to practice in West Virginia in 1934 and located at Parkersburg where he engaged in the practice of his specialty of internal medicine and cardiology until his death.

He served with the Navy during World War II.

He was a member of the Parkersburg Academy of Medicine and had served a term as president. He was also a member of the West Virginia State Medical Association and the American Medical Association.

He had served as a member of the Council of the State Medical Association and as an alternate delegate from West Virginia to the AMA House of Delegates.

He was a Fellow of the American College of Physicians and was certified by the American Board of Internal Medicine.

Besides his widow, he is survived by a daughter, Leanne Lowrance Wade.

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County Societies

HARRISON

Dr. Edmund B. Flink of Morgantown, Professor and Chairman of the Department of Medicine, WVU School of Medicine, was the guest speaker at the regular monthly meeting of the Harrison County Medical Society which was held at the Stonewall Jackson Hotel in Clarksburg on January 5.

Doctor Flink presented an interesting paper on steroid compounds and discussed the indications and dangers in their clinical applications to patients. A question and answer period followed the presentation of the paper.

Several members of the Society participated in a thorough discussion concerning the MAA fee schedule adopted recently by the Department of Public Assistance.

Dr. Richard V. Lynch, Jr., the president, presided at the meeting which was attended by 37 members and three guests.—Andrew J. Weaver, M. D., Secretary.

* * * *

KANAWHA

At the regular monthly dinner meeting of Kanawha Medical Society held at the Daniel Boone Hotel on December 13, 1960, Dr. W. B. Rossman was elected president to succeed Dr. Milton J. Lilly. He will serve during 1961.

Dr. Robert C. Bock of Charleston was named vice president, and Dr. A. B. Curry Ellison was reelected secretary-treasurer.

Elected to the Society's Council were Drs. Kenneth G. MacDonald, Victor S. Skaff and George A. Shawkey. New members of the Blue Shield Board are Drs. John C. Condry, Joseph A. Smith, Ralph J. Holloway and Mark H. Wholey.

Dr. Reed Dingman of the University of Michigan School of Medicine was the guest speaker before the scientific session.

The speaker, whose specialty is plastic surgery, recommended the installation of seat belts in both front and rear seats of automobiles. He said that it is much better to prevent disfiguration of the face than to attempt to correct facial injuries.—A. B. Curry Ellison, M. D., Secretary.

* * * *

LOGAN

Dr. Henry K. Bobroff of Man was elected president of the Logan County Medical Society at the annual Christmas dinner meeting which was held at the East End Barbecue in Logan on December 14. Other officers were elected as follows:

Dr. T. P. Long, vice president; Dr. C. K. Rath, secretary-treasurer; and Dr. I. M. Kruger, board of censors (three-year term).

Dr. Harry F. Cooper of Beckley was the guest speaker at the regular monthly meeting of the Logan County

Medical Society which was held at the East End Barbecue in Logan on January 11. Dr. Henry K. Bobroff, the president, presided at the meeting.

Doctor Cooper presented an interesting paper on "Esophageal Lesions," including malignant and congenital lesions. His paper included a series of case histories from Beckley Hospital and was followed by a question and answer period.

During the business meeting, the Society went on record unanimously as approving the proposed Medical Examiner's Bill which will be introduced in the Legislature.

Seventeen members and one guest attended the meeting.—Charles K. Rath, M. D., Secretary.

* * * *

McDOWELL

Drs. Dante Castrodale and Louis A. Vega presented papers at the regular monthly meeting of the McDowell County Medical Society which was held at the Stevens Clinic Hospital in Welch on January 11.

Doctor Castrodale presented several case histories of "Eventration of the Diaphragm," and Doctor Vega presented a case of "Congenital Diaphragmatic Hernia with the Viscera in the Chest, With a Successful Operation."

During the business meeting, it was announced that a representative of the Department of Public Assistance will be invited to attend a future meeting of the Society to discuss the various medical programs of the Department.

Dr. Louis A. Vega, the president, presided at the meeting which was attended by 17 members.—George L. Fischer, M. D., Secretary.

* * * *

MERCER

Dr. Henry F. Warden, Jr., of Bluefield is the new president of the Mercer County Medical Society. He was elected at the Christmas meeting of the Society held at the Bluefield Country Club in Bluefield on December 19. He succeeds Dr. W. E. Copenhaver.

Dr. Joe McCary was named vice president and Dr. John J. Mahood was reelected secretary-treasurer.

Drs. Upshur Higginbotham, Charles M. Scott and Hampton St. Clair were named as delegates to the House of Delegates, and Drs. Gordon Todd, Jr., J. I. Markell and A. J. Paine were elected alternates.

Elected to the Board of Censors were Drs. R. H. Fowlkes, E. Lyle Gage and Joe McCary.

The meeting, which was in the nature of a Christmas Buffet Dinner, was attended by 88 members and guests.

The committee arranging the decorations was composed of Mrs. Mickey Johnson, Mrs. Martha Thedieck, Mrs. Mary Raub, Mrs. Betty Blaydes and Mrs. Ann Hillier.—John J. Mahood, M. D., Secretary.

* * * *

MONONGALIA

Dr. R. J. Nottingham was elected president of the Monongalia County Medical Society at the regular monthly dinner meeting held at the Hotel Morgan in

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Morgantown on December 6, 1960. He succeeds Dr. David Z. Morgan.

Other officers were elected as follows: Vice president, Dr. C. A. Smith; secretary, Dr. C. C. Romine; and treasurer, Dr. John H. Trotter.

Drs. Carl E. Johnson and Eldon B. Tucker were named delegates to the House of Delegates. Dr. George A. Curry is the hold-ever delegate.

Drs. Maynard P. Pride and E. F. Heiskell, Jr., were named alternate delegates, and Dr. David Z. Morgan was elected a member of the board of censors.

Dr. Eldon Tucker who has been a member of the Society since 1922 was elected to honorary life membership in the Society.—Clarence A. Logue, M. D., Secretary.

* * * *

PARKERSBURG ACADEMY

The annual joint dinner meeting of the Parkersburg Academy of Medicine and Auxiliary was held at the Chancellor Hotel in Parkersburg on January 5.

The guest speaker for the occasion was Dr. William S. Middleton of Washington, Chief Medical Director of the Veterans Administration. His subject was "The Role of the Medical Consultant."

He stressed the importance of consultation in cases where diagnosis is difficult, or the condition of the patient serious. He also emphasized that the attending physician is best qualified to determine the need for consultation.

Doctor Middleton also highlighted his personal experiences during 50 years as a physician, and related some of his experiences when called to attend military, political and state department officials in Europe during World War II.

Other honor guests included Dr. and Mrs. John W. Hash of Charleston, and Dr. and Mrs. Clark K. Sleeth of Morgantown. Doctor Hash is President of the State Medical Association, and Doctor Sleeth recently was appointed Dean of the WVU School of Medicine. Mrs. Sleeth is president of the State Auxiliary.

Entertainment was furnished by dancing and vocal groups from Parkersburg High School.

Dr. William E. Gilmore, the president, presided at the meeting which was attended by 90 members and guests.—Robert C. Lincicome, M. D., Secretary.

* * * *

WYOMING

Dr. Ward Wylie of Mullens was elected president of the Wyoming County Medical Society at the regular quarterly meeting held at the Cow Shed in Pineville on December 16. Dr. Mario Cardenas, also of Mullens, was named secretary-treasurer.

Dr. Jorge de la Piedra was the guest speaker and he presented an interesting paper on fractures of both upper and lower extremities. Pre- and post-operative x-rays were shown and a question and answer period followed the presentation of the paper.

Members of the Women's Auxiliary were guests at the dinner meeting.—Ross E. Newman, M. D., Secretary.

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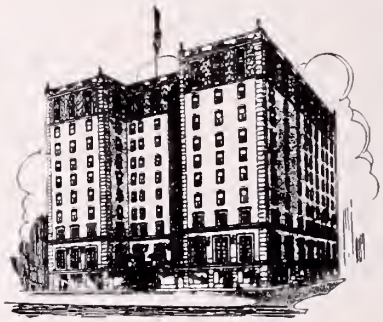

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HARRISON

Colonel Edgar Sites of Charleston was the guest speaker at the regular monthly meeting of the Woman's Auxiliary to the Harrison County Medical Society which was held at the Stonewall Jackson Hotel in Clarksburg on January 5.

Colonel Sites, who is Director of Civil and Defense Mobilization in West Virginia, presented an interesting and informative talk on the Civil Defense program in the state. He outlined the procedure citizens in every community should follow to prepare for a natural disaster or enemy attack.

Mrs. George F. Evans, chairman of the Legislative Committee, discussed the Medical Examiner's Bill which will be introduced during the regular session of the Legislature in Charleston.

Mrs. Herman Fischer, the president, presided during the business session and Mrs. Lawrence Mills was in charge of the program.—Mrs. Paul E. Gordon, Secretary.

The Crux of Psychotherapy

Psychotherapy is not a kind of magic known only to a few privileged practitioners; it is a group of techniques based on much theoretical knowledge and empirical observation. Psychotherapy is not a rigidly prescribed procedure which works in a precise step-by step manner, regardless of who is doing what to whom. It is an extremely flexible, fluid series of technical procedures which must be varied, not only for different patients within a certain disease or symptom group, but also for different psychotherapists. Just as each patient will take from the therapeutic "bill of fare" what he most wants and needs, so will each psychotherapist take from the psychotherapeutic armamentarium that which best fits his own needs and temperament.

And so the crux of psychotherapy is the physician-patient relationship; and this operates essentially through the medium of speech—through talk. The one important thing is to be a good listener. However banal the dictum, a good listener is not easy to define. Certainly he must not be impatient, must not be uninterested. Certainly he must be honest—without censure, ridicule or condescension. The phrase I like best is borrowed from Dr. Emmy Sylvester, who once defined the essence of good psychotherapy as "restful listening." Day after day and patient after patient, nothing will be of greater benefit to your patients than your respectful listening.—Edward M. Weinobel, M. D., in California Medicine.

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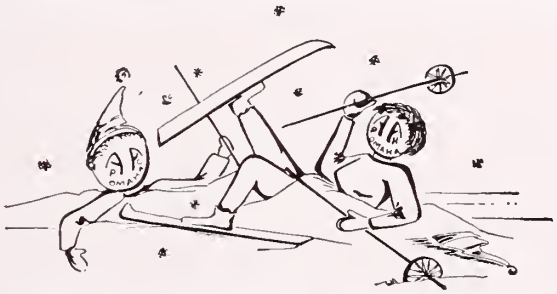

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Book Reviews

THE TEEN-AGE YEARS—By Arthur Roth, M. D., founder and director of the Teen-Age Clinic at the Foundation Medical Center in Oakland, California. Pp. 288. Doubleday and Company, 575 Madison Avenue, New York 22, New York. 1960. Price, $3.95.

Ever since the author devoted himself to treating the physical and emotional ills of adolescents, the new medical specialty of "ephebiatrics" has been established. Doctor Roth is the founder and director of the Teen-Age Clinic at the Kaiser Foundation Medical Center in Oakland, California, where he deals exclusively with this middle ground between pediatrics and general adult practice.

In establishing the Teen-Age Clinic he discovered some startling facts: (1) The adolescents wanted their consultation with the doctor to be private; (2) if a third person had to be in the room for some reason, most patients preferred a nurse rather than a parent; (3) the physician had to guard against substituting for the parent or to supplement them as the adults closest to the adolescents or the adults most looked up to by the teen-agers; and (4) that the parents wanted medical information about the youngsters and the physicians needed the information from the parents about themselves.

From the physician-patient relationship he also found: (1) Teen-agers respect doctors and others who respect them; (2) they will respond readily and be honest with physicians who are honest with them; (3) they like to be appreciated and assume responsibility for their own health problems if they are given that opportunity.

The book provides a comprehensive explanation of the adolescent changes in height, weight, posture, tissue changes and the influence glands and hormones make on these patients. This removes the fuzzy thinking most parents and teen-agers have towards abnormals in growth and development, including the early developers and late developers. The social changes the teen-agers confront in relationship to adults is brought into proper perspective.

Specifically, Doctor Roth discusses the common problems of the "healthy age" beginning with the dietary differences in teen-agers, the differences in physical

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development, and the types of problems which are common to parents and the teen-agers alike. Many interesting examples are given such as why Johnny won't eat, or why Susie is so fat and what can be done about these familiar parental complaints. Health protection, immunizations, physical fitness and muscular development are intelligently explained to the satisfaction of the reviewer.

The long and short of development with weight problems is explained in some detail. The role the parents play in the problem of overweight gives this trying situation its proper clarification.

There are three chapters on sexual problems which begin with the changes from boy to man and girl to woman. The author discusses many of the fallacies common to teen-agers and parents in their thinking and understanding about sex problems. For the male he explains puberty changes, masturbation, homosexual tendencies and heterosexual gratification. For the female, he discusses adolescent relationships, preparation for motherhood, the normal menstrual pattern, and the abnormal phases of menstruation with late developers, abnormal periods, painful periods, absence of periods, and finally pregnancy in adolescence.

The teen-age norms are explained by systems, with the author devoting complete chapters to each subject. The normals and abnormals are given for skin diseases, headaches, backaches, and bellyaches; respiratory infections; heart; genito-urinary system; orthopedic problems; eye and ear problems; teeth; and an excellent chapter on handicaps including cerebral palsy.

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mental retardation, seizures, grand mal and petit mal, and diabetes.

The chapter on medical emergencies includes the signs and treatment of burns, sprains, bleeding, fractures, fainting and drowning. The book ends with a chapter on mental health and a common-sense discussion of this problem.

The importance of the book lies in the author's understanding of the teen-age problems and their solution in relationship with themselves and with grown-ups. A proper perspective is maintained throughout the book, keeping the discussions confined to the middle period of these growing young adults. There is a tremendous wealth of source material for parents and teen-agers alike.—Frederick H. Dobbs, M. D.

Books Received

THE GENTLE LEGIONS—By Richard Carter. Pp. 335. Doubleday and Company, Inc., 575 Madison Avenue, New York 22, New York. 1961. Price $4.50.

* * * *

EPIDEMIC—By Frank G. Slaughter. Pp. 286. Doubleday and Company, Inc., 575 Madison Avenue, New York 22, New York. 1961. Price $4.50.

* * * *

BELOVED PROFESSOR—Life and Times of William Dodge Frost—By Russell E. Frost. Pp. 350. Vantage Press, Inc., 120 W. 31st Street, New York 1, New York. 1961. Price $3.75.

It takes a clever man to turn cynic, and a wise man to be clever enough not to.—Fannie Hurst.

Elements of Medical Practice

Some time ago an editorial appeared in the Minneapolis Star, was reprinted in the Kansas City Times, and quoted in part in some county and state medical journals. Being as true now as then, let us quote again: "A retail store group has just completed a survey on loss of customers and the reasons are rather astonishing. One per cent die; 3 per cent move away; 4 per cent are classified as floater patrons; 5 per cent switch stores on the recommendations of friends; 9 per cent find they can buy cheaper at another store; 10 per cent are chronic beefers, but—get this—68 per cent of lost customers blame it on the indifference of sales personnel."

Any professional man who feels that this does not apply to him should take a business inventory of his own office. How about the patients who disappear and then reappear in another's reception room and on the docket at another hospital? We all have something to sell, as does each of our employees. The voice over the telephone, the reception in the "waiting room," and the nurse behind the needle contribute to the patient's impressions of the physician and his ability to make the trip worthwhile.

The ancillary elements of medical practice and services are not elementary, and they should not be subordinated. May we be ever mindful of their significance and importance in our own practices and in the public relations upon which we depend.—Rocky Mountain Medical Journal.

OFFICERS OF COMPONENT SOCIETIES

Society	President		Secretary		Meetings
Barbour-Randolph-Tucker	John L. Rittmeyer	Philippi	Charles L. Leonard	Elkins	3rd Thurs.
Boone	W. L. Barbour	Whitesville	H. H. Howell	Madison	2nd Wed.
Brooke	James E. Wise	Follansbee	H. L. Hegner	Wellsburg	
Cabell	C. Stafford Clay	Huntington	W. L. Neal	Huntington	2nd Thurs.
Central West Virginia	Harold D. Almond	Buckhannon	R. L. Chamberlain	Buckhannon	As Scheduled
Eastern Panhandle	Jules F. Langlet	Charles Town	F. A. Hamilton, Jr.	Martinsburg	Quarterly
Fayette	W. P. Bittinger	Summerlee	Ivan H. Bush, Jr.	Oak Hill	1st Wed.
Greenbrier Valley	Eugene McClung	Lewisburg	E. L. Crumpacker	White Sul. Spgs.	2nd Wed.
Hancock	E. M. Clubb, Jr.	Weirton	Edward A. Gretchen	Weirtan	2nd Tues.
Harrison	Richard V. Lynch, Jr.	Clarksburg	Andrew J. Weaver	Clarksburg	1st Thurs.
Kanawha	William B. Rossman	Charleston	A. B. Curry Ellison	Charleston	2nd Tues.
Logan	Henry Bobroff	Man	Charles K. Rath	Logan	2nd Wed.
Marion	S. L. Stillings	Mannington	G. Thomas Evans	Fairmont	Last Tues.
Marshall	H. B. Ashworth	Moundsville	J. W. Myers	Moundsville	Semi-Ann.
Mason	C. Leonard Brown	Pt. Pleasant	Dan Glassman	Pt. Pleasant	
McDowell	Louis Vega	Welch	George L. Fischer	Welch	2nd Wed.
Mercer	Henry F. Warden, Jr.	Bluefield	John J. Mahood	Bluefield	3rd Mon.
Mingo	A. H. Henderson	Williamson	Robert J. Tchou	Williamson	2nd Thurs.
Monongalia	R. J. Nottingham	Morgantown	C. C. Romine	Morgantown	1st Tues.
Ohio	S. S. Bobes	Wheeling	H. G. Dickie	Wheeling	4th Tues.
Parkersburg Academy	William E. Gilmore	Parkersburg	Robert C. Lincicome	Parkersburg	1st Thurs.
Potomac Valley	H. Luke Eye	Franklin	Philip G. Staggers	Keyser	2nd Wed.
Preston	John F. Lehman	Kingwood	C. Y. Moser	Kingwood	4th Thurs.
Raleigh	Harry F. Cooper	Beckley	Thomas L. Martin	Beckley	3rd Thurs.
Summers	D. W. Ritter	Hinton	B. W. McNeer	Hinton	3rd Wed.
Taylor	Paul P. Warden	Grafton	R. D. Stout	Grafton	Last Thurs.
Wetzel	Lemoyne Coffield	New Martinsville	C. P. Watson, Jr.	New Martinsville	Monthly
Wyoming	Ward Wylie	Mullens	Maria Cardenas	Mullens	Quarterly

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The
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—News—

• Compiled from material furnished by Cletis Pride, Public Information Officer, West Virginia University Medical Center, Morgantown, W. Va.

Dr. Charles E. Andrews of Stratford, Oklahoma, has accepted appointment as Associate Professor of Medicine at the West Virginia University School of Medicine. The appointment was announced by Acting President Clyde L. Colson.

Doctor Andrews was graduated from New York University and received his M. D. degree from the Boston University School of Medicine. He interned at the University of Kansas Medical Center, and served residencies there and at the Veterans Administration Hospital in Witchita, Kansas. Prior to his appointment at the University, he served as a member of the faculty at the University of Kansas School of Medicine.

Active in medical research, he is co-author of published articles on hepatic coma, chronic pulmonary disease and bronchial asthma.

Doctor Andrews is a Diplomate of the American Board of Internal Medicine and holds membership in the American College of Physicians, the American Federation of Clinical Research, the American Trudeau Society and the American Medical Association.

Affiliation of Clarksburg VA Hospital

An agreement between the WVU School of Medicine and the Veterans Administration Hospital in Clarksburg whereby the latter becomes a "deans committee hospital" was announced last month by Dean Clark K. Sleeth and Dr. Raymond F. Smith, manager of the VA Hospital.

The agreement stipulates that University faculty members will serve as consultants at the VA Hospital and WVU medical students will receive training there. Later, the VA Hospital will participate with the medical school in the training of physicians in the various medical specialties. In turn, several physicians from the Clarksburg hospital will serve as faculty members of the University Medical Center.

Dr. Edmund B. Flink, Professor and Chairman of the Department of Medicine, has been named chairman of the newly formed dean's committee. Other faculty members on the committee are Drs. Harold I. Amory, R. F. Krause, Bernard Zimmermann and Dean Sleeth.

Representing the VA Hospital are Drs. Raymond F. Smith, R. J. Condry, Walter H. Gerwig, Jr., and Mr. Paul O. Battisti, assistant manager.

Dean Sleeth and Doctor Smith said the most important advantage of the affiliation is that it will provide an interchange of knowledge between the University and the VA Hospital, benefitting patients of both hospitals. The School of Medicine will accept advisory responsibility for all educational and training programs at the VA Hospital, while the VA will retain responsibility for the care of patients and administrative and professional functions.

Affiliation of VA hospitals with medical schools was initiated by the VA in 1947. The 200-bed Clarksburg hospital is the only one of its size in the VA system which has its own teaching program.

Miscellaneous

Dr. Kenneth E. Penrod, vice president—medical affairs, was the guest speaker at the University Day dinner sponsored by the WVU Alumni Association's New York Chapter in that city on February 9. The following evening he addressed the Eastern Panhandle Alumni Chapter in Martinsburg.

Dr. Emil Witschi, pioneer researcher in the field of sex embryology and endocrinology, was the guest lecturer at a seminar held at the Medical Center on January 26. His subject was "Etiology and Abnormal Sex Development."

Doctor Witschi, who is professor of zoology at the State University of Iowa, is internationally known for the inductor theory of sex differentiation, which he formulated and proposed in 1914. He was the recipient of the 1960 Fred Koch Award, the highest honor bestowed by the Endocrine Society.

The appointment of two residents in medicine and one in pediatrics at the University Hospital was announced recently. The appointees are Dr. Cyril D. Gettliffe of Johannesburg, South Africa, chief resident in medicine; Dr. German Lizarralde of Bogota, Colombia, resident in medicine; and Dr. Firouz Farahmand of Kermanshah, Iran, resident in pediatrics.

The National Institutes of Health has awarded a $29,848 grant to the University to support basic research into circulation of the brain by Dr. Byron M. Bloor, associate professor and chairman of the Department of Neurosurgery.

Doctor Bloor has worked for several years to find methods of measuring the amount of oxygen supplied the brain of stroke victims and similar patients. A result of his studies has been the development of an oxygen electrode, which gives a quantitative reading of the brain's oxygen supply.

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The Month in Washington

• From the Washington Office of the American Medical Association.

PRESIDENT Kennedy has asked Congress to increase social security taxes to finance limited medical care for elderly persons on the social security rolls, a plan opposed by the medical profession. The proposal was part of a sweeping health program outlined by Kennedy in a special message to Congress during his first month in the White House.

The Kennedy program also includes federal aid for construction and operation of medical schools, scholarships for medical and dental students, grants for community nursing and hospital services, stepped-up medical research and expanded federal activity in the field of child and youth health.

Under Kennedy's proposal, social security beneficiaries 65 years and older could get up to 90 days of hospitalization for each single illness. However, the patient would have to pay $10 daily for the first nine days of hospitalization with a minimum payment of $20.

After release from a hospital, the elderly person could get up to 180 days in a nursing home. The social security program also would provide for payment by the government of all out-patient diagnostic costs in excess of $20 and community visiting nurse services.

The program would be financed by increased social security taxes by one-fourth of one per cent on both employers and workers and by three-eigths of one per cent on self-employed persons covered by social security. The social security tax base also would be increased from the present $4,800 a year to $5,000.

Enactment of this proposal, coupled with another Kennedy recommendation and increases in the social security tax already scheduled in the law, would mean that workers and employers would be paying $250 each in social security taxes in 1969.

AMA Supports Kerr-Mills Program

Nationwide television audiences were told by an American Medical Association spokesman why the medical profession supports the Kerr-Mills program of medical care for the aged and opposes tieing it in with social security.

In television debates with Sen. Hubert Humphrey (D., Minn.) on NBC-TV and Walter Reuther, organized labor spokesman, on CBS-TV, Dr. Edward R. Annis of Miami, Fla., described the Kerr-Mills program as "sound and effective." He said it "must be given the chance it deserves."

"Congress passed it because it believed that the important thing was to help the people who need help; to help them quickly; and to help them through the machinery of local government," Doctor Annis said.

The AMA Board of Trustees charged the CBS network with "misrepresentations, bias, and distortions" on another program: "The Business of Health—Medicine, Money and Politics."

The network edited out of the taped program the AMA's true position on health care for the aged:

"The AMA believes that any medical care plan is both unsound and unfair which would compel working people to shoulder increased social security taxes to finance health costs of all those over 65 (under social security), rich and poor alike, regardless of whether they want or need such help and which, at the same time ignores millions of indigent elderly who do need help."

50-50 Chance of Approval

Kennedy's health program faces strong opposition in Congress. It seems to be the consensus of Washington observers that it stands a 50-50 chance of getting Congressional approval but not before it has been cut down. There are some who doubt that the Administration's program for medical care of the aged will be acted upon, at least by both houses of Congress, before next year.

Even some Democratic Congressmen with the liberal label were taken back by the scope of Kennedy's health program.

Arthur H. Motley, President of the Chamber of Commerce of the United States, warned that social security taxes are being increased to a point "where people might rebel against the whole Social Security system." He contended that this nation's present personal medical care system is the best of any large nation.

"It's worth crusading for and that is what the Chamber is doing," Motley said.

Public Sentiment

Public sentiment is everything. With public sentiment nothing can fail; without it nothing can succeed. He who molds public sentiment goes deeper than he who enacts statutes or pronounces decisions; he makes statutes or decisions possible or impossible to execute. —Abraham Lincoln.

County Societies

CABELL

The regular monthly dinner meeting of the Cabell County Medical Society was held in the Georgian Terrace of the Hotel Frederick in Huntington on Thursday evening, January 12, 1961, at seven o'clock.

At the beginning of the meeting, Dr. I. Ewen Taylor expressed to the members his deep appreciation for their cooperation during his term of office. He then formally installed in office the new president, Dr. C. Stafford Clay.

Dr. Charles A. Hoffman was reelected for a three-year term as a member of the advice and deportment committee. The hold-over members are Drs. A. C. Esposito and Gilbert A. Ratcliff.

Dr. R. R. Brandon was elected a member of the board of trustees of Medical Care, Inc. He succeeds Doctor Esposito.

Dr. Rowland Burns and Dr. Ray M. Bobbitt were elected for a three-year term on the board of trustees of Cabell-Huntington Hospital.

Dr. I. I. Hirschman was elected to honorary membership in the Society.

The following resolution, offered by Dr. Hoffman was adopted unanimously:

WHEREAS, It is admitted that the existence of several individual Blue Cross-Blue Shield Plans in our state does have the advantages of autonomous local supervision, the close-knit relations of local control, and the solution of local problems by persons well versed in their nature; it must be recognized that disadvantages also exist, such as the difficulty of negotiating and enrolling national contracts, with the additional handicap in establishing ideal public relations with those persons involved in the provision of adequate medical care coverage to larger groups of employees; and,

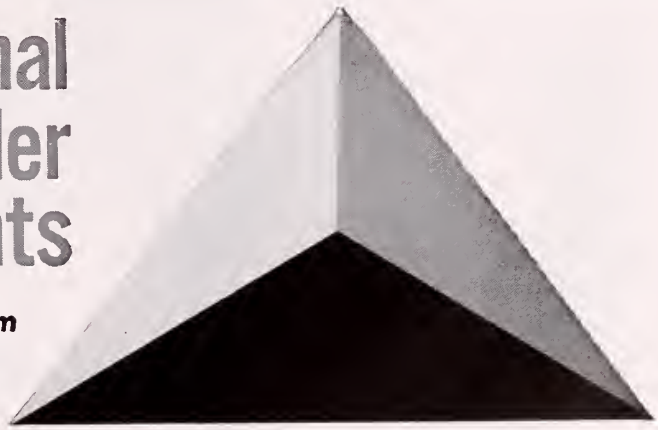
WHEREAS, The contribution of an amount of thirty-five cents per year from each present Blue Cross and each Blue Shield subscriber would provide sufficient funds to develop and operate a central, state-wide Public Relations and National Enrollment Office which would serve each individual plan without interference to its autonomy.

THEREFORE, BE IT RESOLVED By the Cabell County Medical Society, That the Council of the West Virginia State Medical Association be urged to:

1. Request the West Virginia Hospital Association and the West Virginia State Medical Association to cooperate with the Blue Cross-Blue Shield Association of West Virginia in the development and operation of this proposed Public Relations and National Enrollment Office;
2. Request the approval and cooperation of the individual Blue Cross-Blue Shield plans in the development and establishment of a central, statewide public relations agency;
3. Cooperate in every way in the development and operation of such a public relations agency; and,
4. Make an effort to interest all Blue Shield plans in this state toward the establishment of a common fee schedule which would apply in every community.

The Society went on record in favor of the designation of the Huntington State Hospital as a center for

3-dimensional support for older patients



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psychiatric training of student nurses. In the discussion of the subject, it was brought out by Dr. W. E. Bray that 50 per cent of the hospital beds in West Virginia are occupied by the mentally ill, and that there is not at the present time an approved center for the training of nurses in psychiatry.

The following resolution, offered by Dr. Walter R. Wilkinson, concerning the designation of Marshall College as a University, was unanimously adopted:

WHEREAS, It is assumed that the State of West Virginia will accept its fair share of the Nation's responsibility of caring for the expected increase in college enrollments; and,

WHEREAS, Marshall College, being situated in one of the more densely populated areas of the state, must grow in size and broaden its educational facilities and curricular offerings in accordance with the needs and demands of the people of this area; and,

WHEREAS, Marshall College has now reached a degree of complexity and educational eminence that clearly takes it out of the "college" class and gives it the stature of a university; and,

WHEREAS, The Cabell County Medical Society is especially interested in higher education in this area:

THEREFORE, BE IT RESOLVED, That the Cabell County Medical Society strongly recommends that the West Virginia Board of Education give immediate and serious consideration to changing the institutional designation of Marshall from "college" status to "university" status by changing the name to Marshall University.

The Society voted unanimously to send flowers to the dean of the Cabell County Medical Society, Dr. T. W. Moore, a patient in St. Mary's Hospital.

A symposium on public relations was one of the highlights of the monthly dinner meeting of the Cabell County Medical Society held in the Georgian Terrace of the Hotel Frederick on February 9.

Dr. Walter R. Wilkinson, co-chairman of the public relations committee, served as moderator, and the members of the panel were Dick Dreyfuss, program director, WSAZ-TV; Tom Garten, vice president and general manager, WSAZ-TV; and H. R. Pinckard, editor of the Herald Advertiser.

Candid and forthright views were expressed by the panel members concerning the public relations of the medical profession. In summary, it was brought out that the public regards the AMA as a lobby organization "more interested in the welfare of the doctors than of the public" . . . Many people are quite loyal to their personal physicians, but are highly critical of the medical profession . . . Organized medicine should make a strenuous effort to convince the public that its objections to socialized medicine are based on concern for the welfare of the patient as well as of the

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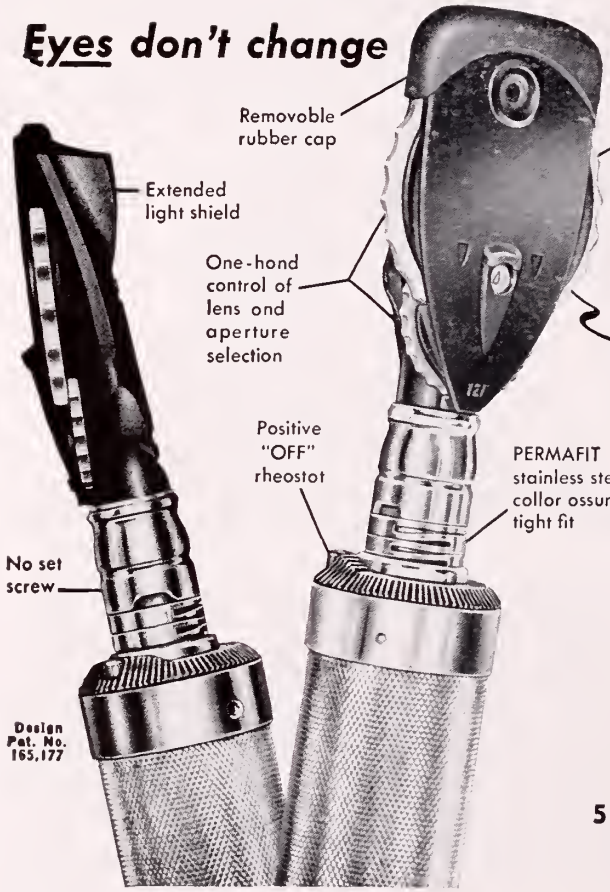

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doctor . . . News, progress reports and educational programs relative to science and medicine consistently command large audiences and are avidly sought by press, radio and television.

Members of the panel said that local news media would welcome the arrangement of a seminar by physicians which would apprise newsmen concerning the ethics of releasing medical information and at the same time enable physicians to learn something of the problems of the news media.

Finally, it was suggested that organized medicine, nationally and locally, would be well advised to employ advertising agencies to conduct for them a continuing program of public education. In addition, individual physicians should make every effort to participate actively in a wide variety of civic enterprises.

The president, Dr. C. Stafford Clay, presided at the meeting which was attended by 73 members.—W. L. Neal, M. D., Secretary.

* * * *

FAYETTE

Dr. W. P. Bittinger of Summerlee was elected president of the Fayette County Medical Society at a meeting held at the Glen Ferris Inn on February 1.

Dr. J. B. Thompson of Oak Hill was elected vice president and Dr. Ivan H. Bush, Jr., also of Oak Hill, was named secretary-treasurer.

Dr. W. L. Claiborne of Montgomery was the speaker at the scientific session. The subject of his paper was "Multiple Myeloma," and he presented several case reports.

During the business session, the Society approved the proposed schedule for polio clinics in Fayette County. —Ivan H. Bush, Jr. M. D., Secretary.

* * * *

HARRISON

Dr. Brian B. Blades of Washington, D. C., Professor and Head of the Department of Surgery at George Washington University School of Medicine, was the guest speaker before the regular monthly meeting of the Harrison County Medical Society, held at the Stonewall Jackson Hotel in Clarksburg on February 2. His subject was "Cardiac Arrest," with emphasis on prevention.

The president, Dr. Richard V. Lynch, Jr., presided at the meeting which was attended by 32 members and several guests, including representatives of the local heart society.—Andrew J. Weaver, M. D., Secretary.

* * * *

LOGAN

An informative discussion on the subject of carcinoma of the lung was led by Doctor Chang of Man Memorial Hospital at the regular monthly meeting of the Logan County Medical Society which was held on February 8 at the East End Barbecue in Logan. The speaker illustrated his remarks by x-rays and the presentation of case histories from the Man Hospital.

At the business meeting preceding the scientific session, Dr. Harold Van Hoose presented a summary of the action taken on the various legislative matters by

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HUNTINGTON, WEST VIRGINIA

the Council of the State Medical Association at the winter meeting held in Charleston on February 5.

The Society went on record unanimously as favoring the enactment of the bill providing for the disposition by written instrument of human eyes after death.

The president, Dr. Henry K. Bobroff, presided at the meeting which was attended by sixteen members and guests.—Charles K. Rath, M. D., Secretary.

* * * *

McDOWELL

The regular monthly meeting of the McDowell County Medical Society was held at Grace Hospital in Welch on February 8.

It was announced that the president had appointed a disaster committee composed of Dr. John H. Murry, chairman, and Drs. J. Hunter Smith and Jorge Ribeiro.

It was also announced that a committee on aging had been appointed, with Dr. Kenneth N. Byrne, as chairman, and Drs. Hendrick A. Bracey and Charles B. Chapman.

Representatives of the local department of public assistance were present at the meeting and discussed the new MAA program.

The president, Dr. Louis A. Vega, presided at the meeting, which was attended by 25 members and guests.—George L. Fischer, M. D., Secretary.

* * * *

MERCER

Dr. Ralph H. Nestmann of Charleston, medical consultant to the West Virginia Division of Vocational Rehabilitation, was the guest speaker before the regular monthly dinner meeting of the Mercer County Medical Society held at the University Club in Bluefield on January 16, 1961.

The speaker explained in detail the procedure necessary for determining disability under the OASI program. A movie was shown and there was general discussion on the subject, with questions and answers from the floor.

Dr. Henry F. Warden, Jr., the president, presided at the meeting, which was attended by 41 members and guests.—John J. Mahood, M. D., Secretary.

Fame is a figment of a pigment. It comes and goes. It changes with every generation. There never were two fames alike. One fame is precious and luminous; another is a bubble of a bauble.—Carl Sandburg.

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HARRISON

Dr. George W. Rose of Clarksburg was the guest speaker before the regular monthly dinner meeting of the Woman's Auxiliary to the Harrison County Medical Society held at the Stonewall Jackson Hotel in Clarksburg on February 2.

The speaker, who is a member of the Harrison County Board of Education, discussed interestingly and informatively education generally, and mentioned specifically problems that have to be met and solved in the Harrison County schools.

The president, Mrs. Herman Fischer, presided at the business session, and Mrs. W. N. Walker, Jr., was in charge of the program.—Mrs. Paul E. Gordon, Correspondent.

* * * *

MINGO

Dr. Robert J. Tchou was the guest speaker at the regular monthly meeting of the Woman's Auxiliary to the Mingo County Medical Society which was held at the Mountaineer Hotel in Williamson on January 26.

Doctor Tchou showed two films in connection with his talk on mental health. The first film, "Preface to a Life," depicted the effect of three parental attitudes toward a child and the subsequent influence on the child's developing personality. The other film, "Life with Baby," showed how children grow mentally and physically.

Mesdames C. P. Winkler and T. B. Montgomery were hostesses for the meeting.—Mrs. Robert J. Tchou, Secretary.

* * * *

OHIO

Mrs. Jay W. Stocking was the guest speaker at the January meeting of the Woman's Auxiliary to the Ohio County Medical Society. Her subject was "Home Preparedness" and she also presented a film on "Radioactive Fallout."

Mrs. Willard J. Howland, Jr., a member of the Auxiliary, presented a monologue on "The Lady with a Lamp" at the February meeting which was held at the Elks Lodge in Wheeling.—Mrs. Andrew J. Barger, Publicity Chairman.

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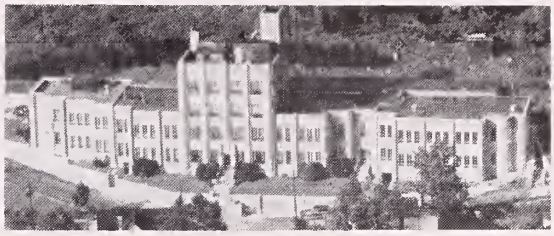

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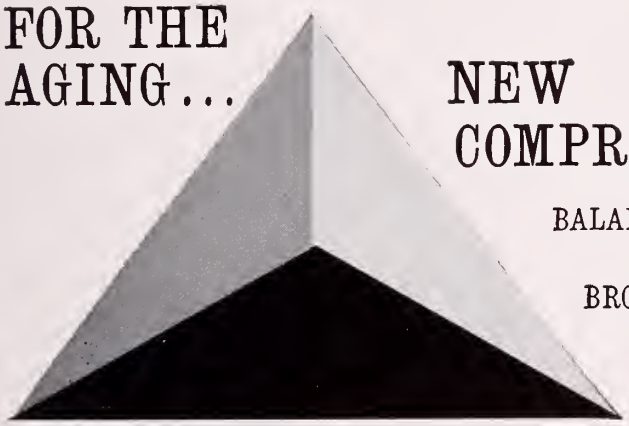

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Vol. 57 No. 4

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Member 1961

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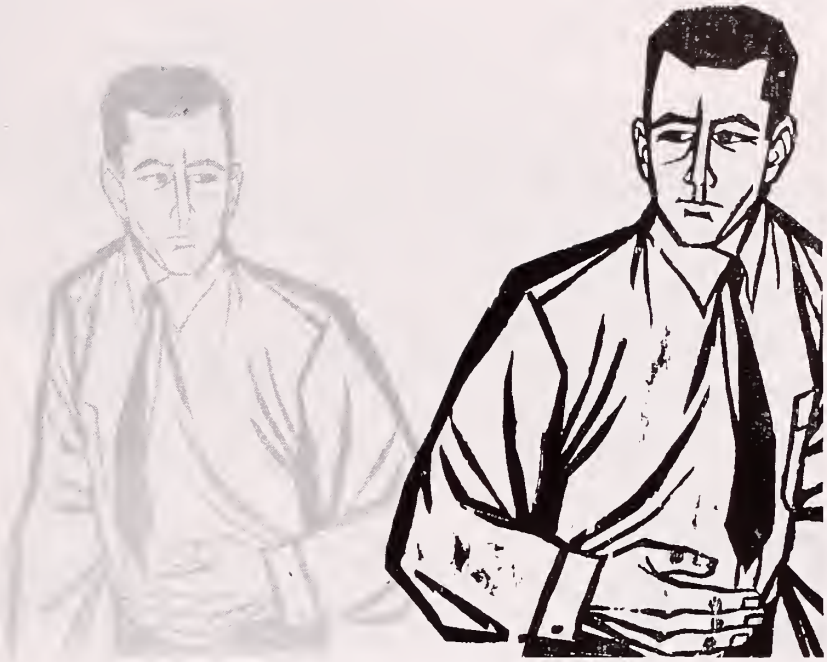

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1. Krantz, J. C., Jr., and Carr, C. J.: The Pharmacologic Principles of Medical Practice, Baltimore, The Williams & Wilkins Company, 1958, p. 843.

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WVU Medical Center
—News—

Mrs. Edward J. Van Liere has been named president of the newly formed Auxiliary to the West Virginia University Hospital. She is the wife of Dr. Edward J. Van Liere, Professor of Physiology and former Dean of the School of Medicine. Other officers of the organization are as follows:

Mrs. Edmund B. Flink, first vice president; Mrs. Donovan H. Bond, second vice president; Mrs. Ray O. Duncan, third vice president; Mrs. C. M. Fraleigh, recording secretary; Mrs. Jack Fleming, corresponding secretary; Mrs. Charles W. Blissitt, treasurer; Mrs. James E. Coombs, assistant treasurer; and Mrs. C. Ben Pride, historian.

Mrs. E. J. Van Liere

A general membership meeting was held at the Medical Center on March 14. The speakers were Dr. Kenneth E. Penrod, vice president-medical affairs, and Eugene L. Staples, director of the Hospital.

Mrs. Van Liere said the Auxiliary will provide volunteer service to the University Hospital and its patients. She said both men and women from throughout the state are eligible for membership.

New Appointments Announced

Dr. Raphael J. Condry, chief of the medical service at the VA Hospital in Clarksburg, has been appointed associate professor of medicine at the School of Medicine.

A native of Elkins, Doctor Condry attended the two-year School of Medicine at the University and received his M. D. degree from the University of Maryland School of Medicine in 1927. He took postgraduate work at the New York Postgraduate School, Harvard Medical School, the University of Vienna, and at several hospitals in London.

He served with the Medical Corps of the United States Navy, 1941-45, and was released with the rank of Commander. He was chief of the medical service at the United States Navy Hospital in Norfolk, Virginia, 1944-45.

From 1946 to 1960, he was chief of the medical service at Davis Memorial Hospital in Elkins. He is a member of the Barbour-Randolph-Tucker Medical Society, West Virginia State Medical Association and the American Medical Association. He served a term as president of his local society.

Doctor Condry's appointment follows a recent agreement between the WVU School of Medicine and the VA Hospital in Clarksburg, whereby the latter has been established as a "Dean's Committee Hospital."

• **Compiled from material furnished by Cletis Pride, Public Information Officer, West Virginia University Medical Center, Morgantown, W. Va.**

Morgantown Physicians Named to Faculty

Three Morgantown physicians have been appointed clinical assistant professors in the Department of Obstetrics and Gynecology at the School of Medicine.

The appointees are Dr. Charles S. Mahan and Dr. C. Truman Thompson as assistant professors of obstetrics and Dr. Robert Greco as assistant professor of obstetrics and gynecology. All will continue their private practice in Morgantown while serving part-time on the University faculty.

A native of Follansbee, Doctor Mahan was graduated from Washington and Jefferson College and received his M. D. degree from the University of Pennsylvania School of Medicine. He has served previously as a guest lecturer at the School of Medicine.

Doctor Thompson is a native of Littleton, and received A. B. and B. S. degrees at the University. He received his M. D. degree from the University of Maryland School of Medicine.

Doctor Greco was born in Rivesville and also holds two degrees from the University. He received his M. D degree from the Medical College of Virginia.

Doctor Harley Joins University Staff

Dr. Mary Dorcas Clark Harley of Morgantown has accepted appointment as a part-time physician at the West Virginia University Health Service. A native of Hopwood, Pennsylvania, Doctor Harley was graduated from the University and received her M. D. degree from the University of Maryland School of Medicine, where she also served an internship and a residency in medicine.

She was a member of the Health Service staff, 1948-49, and has been engaged in the private practice of medicine in Terra Alta and Morgantown since 1950.

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The Month in Washington

• **From the Washington Office of the American Medical Association.**

THE medical profession, the U. S. Public Health Service and the National Foundation are working together in an all-out drive to get as many persons as possible to take Salk vaccine shots before the summer polio season starts. The Sabin live polio vaccine will not be available in quantity this year.

The Salk vaccine campaign drive is directed particularly at children and younger adults in the lower economic groups.

Dr. Julian P. Price, pediatrician of Florence, South Carolina, and chairman of the American Medical Association's Board of Trustees, pointed out that many children and younger adults in the lower income groups have not been inoculated against polio.

"As long as 'islands of unvaccinated persons' exist even within well-vaccinated communities, polio epidemics remain a serious threat," Doctor Price said.

Dr. Luther L. Terry, Surgeon General of the USPHS, emphasized the need for immunizing infants. He also said that the USPHS will encourage behavioral studies to determine reasons why some people refuse to take polio shots. It is hoped that then methods may be devised to overcome such refusal.

Doctor Terry called particular attention to the findings of the USPHS's Advisory Committee on Poliomyelitis Control that the recommended dosage schedules may be modified to permit the administration of three shots of Salk vaccine before summer to persons who have not had any vaccine before.

Doctor Price stressed that success of the "babies and breadwinners" polio vaccine campaign depends upon joint activity at the local level by medical societies, boards of health and voluntary health agencies. He expressed confidence that the more than 2,000 state and county medical societies throughout the country would cooperate wholeheartedly.

"Contrary to recent reports (in Scripps-Howard Newspapers)," Doctor Price said, "The AMA is strongly behind every effort to encourage the public to take advantage of the Salk vaccine without delay."

The Advisory Committee urged that "immediate steps . . . be taken by all interested groups to intensify drives for vaccination with the formalin-inactiviated (Salk) vaccine." The Committee also endorsed the plan to direct the campaign particularly at the lower socioeconomic and younger age groups.

The Committee recommended that the first available supplies of the Sabin live, oral vaccine be utilized in the following priority order:

1. Epidemic control, investigations and community studies.
2. Immunization of infants and pre-school children.
3. Selected area immunization of those segments of the population that are least well immunized.

The President's Health Program

Congress now has before it legislation to carry out all of President Kennedy's broad health program, but it is doubtful that the lawmakers will act upon some of it this year.

Kennedy health legislation sent to Congress recently included bills on medical education and federal grants for nursing homes and other community facilities.

The Chief Executive also recommended an expanded program to combat water pollution. He requested Congress to authorize federal grants of $125 million a year for 10 years to help states forming interstate water pollution control agencies. He also recommended increased federal aid to communities building sewage treatment plants.

The President proposed creation of a special unit in the Public Health Service to handle both air and water pollution matters.

Medical Education Proposals

In accompanying letters to the presiding officers of the House and the Senate, Kennedy said he regarded his medical education proposals as the keystone of the overall health program because "we are not presently training enough (physicians) to keep up with our growing population."

The other bill would "make possible a substantial addition to the number of nursing home facilities to care for long-term patients, and . . . help relieve the shortages of home health care programs," Kennedy said.

The medical education measure would authorize federal grants for scholarships for medical and dental students. The maximum individual scholarship would be $2,000 a year. Participating schools also would be eligible for federal grants of $1,000 per scholarship to help pay a school's operating expenses.

Obituaries

ROBERT CARSON FUGATE, M. D.

Dr. Robert Carson Fugate, 57, of Bluefield, died February 14, 1961 at his home in that city. Death was attributed to a heart attack.

Doctor Fugate was born at Richlands, Virginia, on May 28, 1903, son of Mrs. Maude McQuire Fugate and the late T. Watkins Fugate.

He was a graduate of Emory and Henry College and Washington & Lee University and received his M. D. degree in 1937 from Duke University School of Medicine. He served his internship at Harper Institute in Detroit, 1937-38, and a residency in ophthalmology and otorhinolaryngology at Duke Hospital in Durham, North Carolina, 1938-41. He located at Bluefield in 1941 and, with the exception of service with our Armed Forces, engaged actively in the practice of his profession there until his death.

He was on active duty in the Navy from 1942 until 1945 and was released with the rank of Lieutenant Commander, USNR.

Doctor Fugate was a member of the Mercer County Medical Society, the West Virginia State Medical Association and the American Medical Association. He served as treasurer of his local society in 1948.

Besides his widow, he is survived by his mother who lives in Roanoke, Virginia.

Edentulousness

Toothlessness was the subject of a news release issued on December 6 (1960) by the Health Insurance Institute, an instrumentality of the commercial health insurance companies. Reporting on data gathered by the HEW Department, it said that approximately 22,000,000 persons, or 13 per cent of the people in the United States, have lost all of their permanent teeth.

Age, area of residence, income and education all seemed to have significant bearing upon the rate at which people submit to extractions. Virtually no one under 15 years of age has had all of his or her teeth removed, and only one per cent of those between 15 and 25 years of age have done so. But 22 per cent of those in the 45-54 year age group have none of their "own" teeth, and the figure is 67 per cent for those 75 years of age and older.

Women are more numerous than men in the ranks of the edentulous—14 per cent of all females, as compared with 12 per cent of all males.

Among members of families with incomes under $2,000 per year, the edentulous rate is 24 per cent, but among those with $7,000 or more per year, the rate is only 9 per cent. Where the head of the family has had less than five years of schooling, the rate is 19 per cent, and where the family head is college-trained, the rate is only 6 per cent—Journal, Iowa State Medical Society.

A woman rarely realizes her age until the birthday cake begins to look like a forest fire.—Anon.

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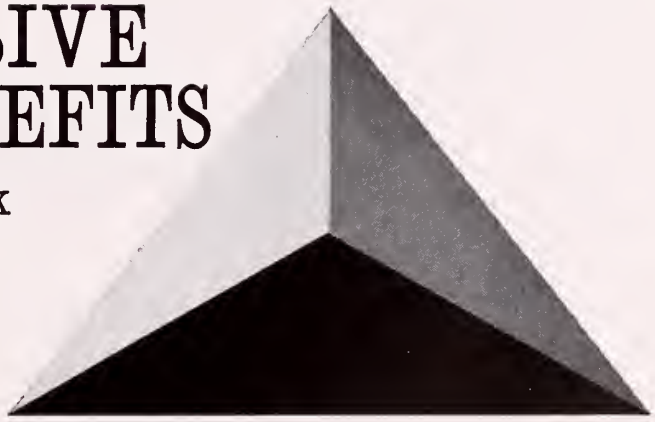

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County Societies

CABELL

The current status of the Blue Shield board in the Cabell area was discussed by several members of the Cabell County Medical Society at the regular monthly meeting held on February 16 in the Georgian Terrace of the Hotel Frederick in Huntington.

Following general discussion, Dr. Donald Stubbs of Washington, D. C., president of the Medical Society of the District of Columbia, was introduced as the speaker of the evening.

Doctor Stubbs, who has had wide experience in Blue Shield work, pointed out that the National Blue Shield has consistently upheld local autonomy of its individual branches in local plans. He said that West Virginia has the nearest approach to true local operation.

The speaker said that many problems have resulted from the fantastic growth of pre-payment plans, but that Blue Shield has tended to improve the offerings of commercial insurance companies. "Blue Shield," he said, "has the responsibility of not altering, but rather protecting going local fees."

The president, Dr. C. Stafford Clay, presided at the meeting.—W. L. Neal, M. D., Secretary.

HARRISON

Dr. Mark H. Wholey, radiologist of Charleston, was the guest speaker before the regular monthly dinner meeting of the Harrison County Medical Society held at the Stonewall Jackson Hotel in Clarksburg on March 2. His subject was "Radioisotopes in Medical Practice."

The president, Dr. Richard V. Lynch, Jr., presided at the meeting which was attended by 39 members and one guest.—Andrew J. Weaver, M. D., Secretary.

* * * *

LOGAN

Dr. Thomas J. Holbrook of Huntington was the guest speaker at the regular monthly meeting of the Logan County Medical Society which was held at the East End Barbecue in Logan on March 8.

Doctor Holbrook presented an interesting paper on "Vascular Lesions of the Brain," and supplemented his discussion with a film. A question and answer period followed the presentation of the paper.

During the business session, it was announced that steps have been taken toward the incorporation of the Society. There was also considerable discussion concerning national and state legislation of interest to the medical profession.

Dr. Henry K. Bobroff, the president, presided at the meeting which was attended by more than twenty members and guests.—R. M. Kessel, M. D., Acting Secretary.

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MERCER

Mr. Robert Daniel, field representative of the American Cancer Society, was the guest speaker before the regular monthly meeting of the Mercer County Medical Society held at the University Club in Bluefield on February 20, 1961.

The speaker presented a film showing the techniques and procedures for cancer detection examinations. It was emphasized that routine x-ray and Papanicolaou smears of the female genital tract greatly enhances the chances for detection of cancer.

The speaker presented pamphlets and brochures concerning cancer and left a supply for distribution by the members to their patients.

At the business meeting following the scientific program, the matter of the current program for medical assistance for the aged was discussed by several members, after which the following committee was appointed by the president to make a study of the program so as to be prepared to answer questions at the next meeting of the Society: Drs. Robert Gatherum, L. J. Pace and E. Lyle Gage.

The Society voted to contribute the sum of $25 to the National Society for Medical Research.

The president, Dr. Henry F. Warden, Jr., presided at the meeting which was attended by 38 members and guests.—John J. Mahood, M. D., Secretary.

* * * *

OHIO

Miss Mary Jane Hess, regional director of the Department of Public Assistance, was the guest speaker before the regular meeting of the Ohio County Medical Society in February. She discussed in detail the procedure to be followed under the new MAA program and presented a clear picture of problems affecting physicians under the DPA program.

Dr. R. U. Drinkard submitted a comprehensive report concerning the progress being made by the medical relief and insurance committee, and Dr. J. C. Curry reported with reference to the work of the public relations committee.

Dr. T. J. Pavlick of the Wheeling Clinic and Dr. Albert Fisher of the Wheeling General Hospital were elected members of the Society. Dr. D. B. Gordon, 14 Englewood Avenue, Elm Terrace, was accepted as a member by transfer from the Barbour-Randolph-Tucker Medical Society.—William H. Hagedorn, Jr., Executive Secretary.

* * * *

PARKERSBURG ACADEMY

Dr. Edmund B. Flink of Morgantown was the guest speaker at the regular monthly meeting of the Parkersburg Academy of Medicine which was held at the American Legion Hall in Parkersburg on March 2.

Doctor Flink, who is Professor and Chairman of the Department of Medicine at the West Virginia University School of Medicine, discussed "Systematic Approach to a Patient with Edema." He presented several case reports and illustrated his paper with slides. He also discussed some of the newer systems of producing fluid loss in patients.

Dr. William E. Gilmore, the president, presided at the meeting which was attended by more than thirty members and guests.—Robert C. Lincicome, M. D., Secretary.

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Corresponding Secretary: Mrs. C. A. Smith, Morgantown
Parliamentarian: Mrs. Claude R. Davisson, Weston

EASTERN PANHANDLE

Dr. Thomas H. McGavack was the guest speaker at the regular monthly meeting of the Woman's Auxiliary to the Eastern Panhandle Medical Society which was held at the Shenandoah Hotel in Martinsburg on March 8.

Doctor McGavack, who is Chief of the Intermediate Service at the VA Hospital in Martinsburg, presented an interesting address on "Answers to Aging." He said the country is experiencing a population explosion and that it would bring certain problems as life expectancy increases, such as health and medical care, socio-economic factors, and adjustment after retirement.

He outlined the differences in the Kerr-Mills bill that was passed by Congress last year and the Kennedy administration bill introduced in Congress recently. He said the administration bill would give inadequate coverage and would be handled entirely by the government, while the Kerr-Mills bill gives coverage to everybody in need, not just those under Social Security, and is administered locally.

Mrs. C. V. Townsend, the president, presided at the luncheon meeting and introduced a new member, Mrs. E. Walter Rice.

Hostesses for the meeting were Mesdames J. K. Guthrie, W. L. Haltom, F. A. Hamilton, N. B. Hendrix and George O. Martin.—Mrs. L. Walter Fix, Correspondent.

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REFERENCES

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HARRISON

A fashion show, featuring the "Americana" look, highlighted a dinner meeting of the Woman's Auxiliary to the Harrison County Medical Society which was held at the Stonewall Jackson Hotel in Clarksburg on March 2.

Franklin Cattone served as commentator of the show and Miss Susan Payne, assisted by Mrs. Ruby Scott, was in charge of the music. New spring fashions were modeled by 13 members of the Auxiliary.

Mrs. Herman Fischer, the president, presided at the meeting and Mrs. C. S. Harrison was in charge of the program.—Mrs. Paul E. Gordon, Secretary.

* * * *

MARION

The regular monthly meeting of the Woman's Auxiliary to the Marion County Medical Society was held at the home of Dr. and Mrs. Robert G. Janes in Fairmont on March 7. Mrs. John D. Lindsay, Jr., the president, presided at the meeting.

Mrs. G. Thomas Evans, a member of the State Commission on Aging, was the speaker and she presented an interesting talk on "Aging in Your Community." She discussed the White House Conference on Aging held early in January in Washington, and also the state workshop on aging held at Cedar Lakes in February.

It was announced that the annual Doctor's Day observance will be held on April 6. Members of the planning committee are Mesdames John D. Lindsay, Jr., Franklin W. Mallamo and Paul S. Gotses.—Mrs. John J. Coogle, Correspondent.

* * * *

MERCER

The regular monthly meeting of the Woman's Auxiliary to the Mercer County Medical Society was held at the Appalachian Assembly Room in Bluefield on February 15. Honor guests were members of the Future Nurses Clubs of Bluefield and Princeton.

Dr. Roy R. Raub of Bluefield was the guest speaker and he showed movies taken while he was in Africa last summer.

Mrs. Raub, the president, presided at the meeting and introduced two new members, Mesdames John J. Bryan and Charles S. Flynn.—Mrs. William F. Hillier, Jr., Correspondent.

* * * *

MINGO

The regular monthly luncheon meeting of the Woman's Auxiliary to the Mingo County Medical Society, held at the Mountaineer Hotel in Williamson on February 23, was dedicated to the Future Nurses of America Club of Williamson High School and a contribution was authorized for the project.

The president, Mrs. W. H. Price, presided at the business session at which reports were submitted by the chairmen of committees.

The following nominating committee was appointed to propose a slate of officers for the coming year. Mesdames W. W. Scott, W. J. Smith and A. H. Henderson.—Mrs. Robert J. Tchou, Secretary.

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MONONGALIA

Dr. David W. Northup was the guest speaker at the regular monthly meeting of the Woman's Auxiliary to the Monongalia County Medical Society which was held at Carroll's Restaurant on February 14.

Doctor Northup, who is Professor and Chairman of the Department of Physiology at the West Virginia University School of Medicine, presented an interesting talk on "Alcoholism—It's Effects on the Human Body and Its Cure."

Mrs. Clement A. Smith, the president, presided at the dinner meeting which was attended by more than 35 members and guests. Hostesses for the meeting were Mesdames Carl E. Johnson, Charles S. Mahan, R. W. Fisher, John H. Trotter and Eldon B. Tucker.—Mrs. Maynard P. Pride, Correspondent.

* * * *

PARKERSBURG ACADEMY

Dr. Clark K. Sleeth, Dean of the West Virginia University School of Medicine, was the guest speaker at the regular monthly meeting of the Woman's Auxiliary to the Parkersburg Academy of Medicine which was held at the Chancellor Hotel in Parkersburg on February 14. Doctor Sleeth was introduced by Mrs. George Gevas, chairman of the program committee.

The speaker discussed the history of the School of Medicine and also outlined in detail the admission policies of the School.

Mrs. Charles H. Barnett, the president, presided at the business meeting. It was announced that the Auxiliary had contributed $85 to the AMEF for the WVU School of Medicine.

Hostesses for the meeting were Mrs. Robert A. McDougal, chairman, and Mesdames F. L. Blair, Ira Connolly, Randall Connolly and Harold F. Gilbert.—Mrs. David B. Thornburgh, Correspondent.

Some Aspects of Allergy

Allergy and immunity may be said to be mirror images of one another. Allergy is the sensitivity to an antigen to which other persons are unsusceptible; immunity is the power to resist an antigen to which other persons are susceptible. Both conditions are very specific, and both require previous contact wtih the substance in question.

A person may be allergic to one antigen and immune to another, and a specific antigen may cause an allergic symptom at one time and an immune condition at another time. If a person is allergic to a substance, contact causes distressing, if not dangerous, symptoms, whereas if he is immune to it, contact causes no evident harm.

The widespread incidence of allergy is not generally realized. There are 16,500,000 cases of allergy in the United States today, and from 15 to 24 per cent of these are cases of urticaria; 1 in 20 Americans has hay fever, and, of these, 1 in 3 develop asthma.—K. J. Johnson, M. D., in The Journal Lancet.

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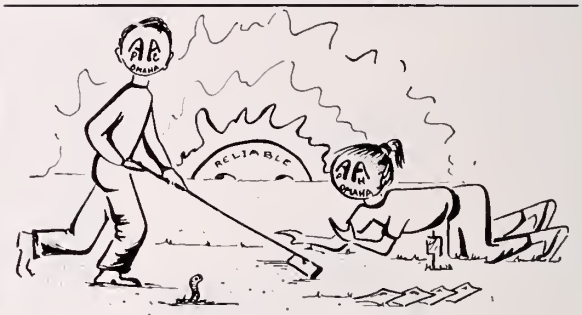

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SEARLE

WVU Medical Center
—News—

• Compiled from material furnished by Cletis Pride, Public Information Officer, West Virginia University Medical Center, Morgantown, W. Va.

ANNOUNCEMENT of the appointment of two cardiologists and a pathologist to the faculty of the West Virginia University School of Medicine was made last month by Acting University President Clyde L. Colson. The new faculty members are Dr. Robert J. Marshall of Rochester, Minnesota, Associate Professor of Medicine; Dr. Russell V. Lucas of Des Moines, Iowa, Instructor in Pediatrics; and Dr. Charles R. Chamberlain of Covington, Virginia, Instructor in Pathology.

Doctor Marshall joined the faculty on May 1 and Drs. Lucas and Chamberlain will assume their duties at the Medical Center on July 1.

Doctor Marshall Native of Ireland

A native of Ireland, Doctor Marshall received his M. D. degree at Queen's University in Belfast, and later served as a member of the pathology and internal medicine faculty at that institution. While at Queen's, he attained membership in the Royal College of Physicians of Ireland and the Royal College of Physicians of London.

He formerly served as Research Associate in Physiology at the Mayo Foundation for Clinical Research, where he has worked since 1958 under the supervision of Dr. Earl H. Wood, internationally-known cardiophysiologist.

He is active in research and clinical cardiology and is the author of numerous articles on peripheral circulation, clinical cardiology, pulmonary circulation and cardiac output.

Doctor Lucas Active in Pediatric Cardiology

Doctor Lucas was born in Des Moines, Iowa, and was graduated from Macalester College in St. Paul, Minnesota. He received his M. D. degree from the Washington University School of Medicine in St. Louis and served an internship and residency at the University of Minnesota Hospital, where he is currently Research Associate in Pediatrics. He holds the National Institutes of Health Fellowship in Cardiology and is a member of the Division of Pediatric Cardiology. In addition to his clinical activities, Doctor Lucas is actively engaged in heart research in association with Dr. Jessie Edwards, well-known cardiologist.

He is a Diplomate of the American Board of Pediatrics and is the author of numerous articles concerning the pathologic physiology of congenital heart disease and the management of children so afflicted.

Instructor in Pathology Named

The third new full-time member of the faculty is Dr. Charles R. Chamberlain, who has been named an Instructor in Pathology. A native of Altoona, Pennsylvania, he is currently a member of the faculty of the University of Virginia School of Medicine.

He was graduated from Virginia Military Institute and received his M. D. degree at the University of Virginia School of Medicine. He interned at Johns Hopkins Hospital in Baltimore and served a residency in pathology at the University of Virginia Hospitals.

He holds an American Cancer Society Clinical Fellowship in pathology, and is a member of the Albemarle County Medical Society and the Medical Society of Virginia.

Miscellaneous

Dean Clark K. Sleeth and Dr. D. Franklin Milam, Associate Professor of Surgery, participated in a Medical Education for National Defense tour of Brooke Army Medical Center at Fort Sam Houston, and the Air Force School of Aviation Medicine, Brooks Air Force Base, both at San Antonio, Texas, March 16-18, and the San Diego Naval Base in California, March 20-21.

Drs. Sleeth and Milam witnessed examples of field medical operations and were briefed on Army research programs during their visit to the Army Medical Center. A highlight of the tour was a demonstration of the handling of mass casualties in the event of thermonuclear attack or industrial disaster.

At the Air Force Base, they were brought abreast of the latest problems in space biology and of various research programs of the Air Force medical and biophysics departments. The San Diego trip was made to observe problems peculiar to the Navy Department of Medicine and to tour the Marine Training Center there.

Dr. Charles G. Wilber, Chief of the Experimental Zoology Branch of the Directorate of Medical Research, Army Chemical Center, Maryland, was the guest speaker at a seminar held at the Medical Center on April 7. His subject was "Nerve Gases—Their Nature, Action and Treatment."

Doctor Wilber, who assumed the deanship of the Kent State University Graduate School on May 1, is a graduate of Marquette University and received M. S. and Ph.D. degrees from Johns Hopkins University. A physiologist, he has had a distinguished career in both teaching and research and is the author of more than 100 papers which have been published in specialty journals.

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The Month in Washington

THE seriousness of the national problem of mental illness was emphasized on three fronts recently in the nation's capital. First, the Joint Commission on Mental Illness and Health reported on a comprehensive five-year study of the overall problem. Second, another special government advisory committee recommended smaller community-sized mental institutions after a two-year study of facilities for care of the mentally ill. Third, a Senate subcommittee held hearings on the constitutional rights of mental patients.

The Joint Commission recommended sweeping reforms in the treatment of mental illness as well as expanded and improved facilities. It said some gains had been made in the past 10 years but that the need for adequate facilities for humane, healing treatment of the mentally ill is still largely unmet.

Inadequate Facilities Cited

More than half of the patients in state mental hospitals do not receive any treatment, largely because of inadequate facilities, the commission said.

The commission recommended that government spending at all levels—federal, state and local—for public mental patient services be stepped-up in the next decade from the present $1 billion a year to $3 billion a year.

Another recommendation was that there be a fully-staffed, full-time mental health clinic for each 50,000 of population.

The commission, which was created in 1955 by a special act of Congress, had 45 members representing every national association and non-government agency concerned with mental health. The American Psychiatric Association and the American Medical Association had the leadership in setting up the commission.

The government advisory committee, composed of 12 state Hill-Burton and mental health authorities, recommended that states concentrate on smaller community or regional facilities "offering a wide spectrum of services."

Dr. Luther L. Terry, Surgeon General of the Public Health Service, urged state governors to use the advisory committee's recommendations as guide-lines for improving mental health facilities.

The Senate Constitutional Rights Subcommittee heard from Dr. Winfred Overholser that there is no foundation to charges that many Americans are "railroaded" into mental hospitals. Doctor Overholser is superintendent of St. Elizabeths Hospital, large federal mental institution in Washington, D. C.

• From the Washington Office of the American Medical Association.

Dr. Lauren H. Smith, vice chairman of the AMA Council on Mental Health, told the subcommittee that the AMA's future program in the field will include emphasis on more use of psychiatry in geriatrics, pediatrics and medical education, both at student and postgraduate levels.

Other activities planned for the AMA program include closer coordination of activities of the AMA council and corresponding committees of state medical societies.

FDA Investigation

The Food and Drug Administration, after the government filed suit against two drug firms for counterfeiting, reported that an extensive investigation showed that there is still relatively little counterfeiting of drugs.

Of 2,700 samples of drugs collected from 900 drugstores in the first three months of this year, only nine were found to be counterfeit.

FDA Commissioner George P. Larrick said he expected the problem of counterfeit drugs to continue because of the lure of easy profits. But he said results of the investigation supported the FDA view that "the facts to date do not warrant disturbing sick people about the quality of medications that they have been taking."

In the counterfeiting suit, General Pharmacal Co., Hoboken, N. J., and Lowell Packing Co., Long Island, N. Y., and eight officials of the two firms were charged with manufacturing counterfeit tranquilizers, diuretics, weight reducers and other drugs and selling them to drugstores in six states. The Justice Department charged that the companies put markings on pills making them appear like other trade-marked brands.

FDA ordered manufacturers, effective May 27, to supply samples of new drugs for testing by the government agency prior to clearance for sale.

In the past, the FDA has relied largely on scientific data supplied by the manufacturers themselves in clearing a new drug as being safe for sale. The FDA tested the drugs only on a limited and occasional basis and after they had been put on the market.

Obituaries

WILLIAM CALVIN CAMP, M. D.

Dr. William Calvin Camp, 83, of Spencer, died April 8, 1961, at his home in that city following a short illness.

Doctor Camp was born at Spencer on April 30, 1877, and was graduated from Marshall College in 1898. He received his M. D. degree from the University of Louisville in 1908, and served an internship at the University of Louisville Hospital. He was licensed to practice in West Virginia in 1908.

Doctor Camp, who is a past president of the Roane County Bank, served as a Captain in the Medical Corps of the United States Army during World War I.

Doctor Camp was an honorary member of the Parkersburg Academy of Medicine, the West Virginia State Medical Association and the American Medical Association. He is survived by seven brothers.

* * * *

HERBERT M. COLEMAN, M. D.

Dr. Herbert M. Coleman, 81, of Iaeger, died March 27, 1961, at a hospital in that city following a short illness.

Doctor Coleman was born at Hurley, Virginia, on March 12, 1880, son of the late Joseph and Arminda (Stacey) Coleman.

He received an LL.B degree from Southwestern University in Louisville, Kentucky, in 1901, and practiced as an attorney in Virginia for several years. He was graduated from the University of Louisville School of Medicine in 1909 and served an internship and residency at the University of Louisville Hospital. He was licensed to practice medicine in West Virginia in 1909 and was located at Matewan and Thacker in Mingo County for 16 years prior to locating in Iaeger in 1930.

Doctor Coleman, who was a former member of the McDowell County Medical Society, the West Virginia State Medical Association and the American Medical Association, served as physician for a number of coal companies and at one time was president of the Panther Red Ash Coal Company.

He is survived by five sons.

* * * *

CHARLES KERMIT DILLEY, M. D.

Dr. Charles Kermit Dilley, 47, of Marlinton, died in his office following a heart attack on April 15, 1961.

Doctor Dilley was born at Huntersville, West Virginia, son of the late Uriah and Icie Amanda (Sharp) Dilley, January 5, 1914. He was graduated from West Virginia University and attended the two-year School of Medicine. He received his M. D. degree from Northwestern University School of Medicine in 1941 and served an internship at Harper Hospital in Detroit, Michigan, 1941-42. He also had postgraduate training at that hospital.

During World War II, he served for 42 months with the Medical Corps of the United States Navy. He was

OFFICERS OF COMPONENT SOCIETIES

Society	President		Secretary		Meetings
Barbour-Randolph-Tucker	John L. Rittmeyer	Philippi	Charles L. Leonard	Elkins	3rd Thurs.
Boone	W. L. Barbour	Whitesville	H. H. Howell	Madison	2nd Wed.
Brooke	James E. Wise	Follansbee	H. L. Hegner	Wellsburg	
Cabell	C. Stafford Clay	Huntington	W. L. Neal	Huntington	2nd Thurs.
Central West Virginia	Harold D. Almond	Buckhannon	R. L. Chamberlain	Buckhannon	As Scheduled
Eastern Panhandle	Jules F. Langlet	Charles Town	F. A. Hamilton, Jr.	Martinsburg	Quarterly
Fayette	W. P. Bittinger	Summerlee	Ivan H. Bush, Jr.	Oak Hill	1st Wed.
Greenbrier Valley	Eugene McClung	Lewisburg	E. L. Crumpacker	White Sul. Spgs.	2nd Wed.
Hancock	E. M. Clubb, Jr.	Weirton	Edward A. Gretchen	Weirton	2nd Tues.
Harrison	Richard V. Lynch, Jr.	Clarksburg	Andrew J. Weaver	Clarksburg	1st Thurs.
Kanawha	William B. Rossman	Charleston	A. B. Curry Ellison	Charleston	2nd Tues.
Logan	Henry Bobroff	Man	Charles K. Rath	Logan	2nd Wed.
Marion	S. L. Stillings	Mannington	G. Thomas Evans	Fairmont	Last Tues.
Marshall	H. B. Ashworth	Moundsville	J. W. Myers	Moundsville	Semi-Ann.
Mason	Lewis D. Telle	Pt. Pleasant	Dan Glassman	Pt. Pleasant	Bi-Monthly
McDowell	Louis Vega	Welch	George L. Fischer	Welch	2nd Wed
Mercer	Henry F. Warden, Jr.	Bluefield	John J. Mahood	Bluefield	3rd Mon
Mingo	A. H. Henderson	Williamson	Robert J. Tchou	Williamson	2nd Wed.
Monongalia	R. J. Nottingham	Morgantown	C. C. Romine	Morgantown	1st Tues.
Ohio	S. S. Bobes	Wheeling	H. G. Dickie	Wheeling	4th Tues.
Parkersburg Academy	William E. Gilmore	Parkersburg	Robert C. Lincicome	Parkersburg	1st Thurs.
Potomac Valley	H. Luke Eye	Franklin	Philip G. Staggers	Keyser	2nd Wed.
Preston	D. R. Davis	Kingwood	C. Y. Moser	Kingwood	4th Thurs
Raleigh	Harry F. Cooper	Beckley	Thomas L. Martin	Beckley	3rd Thurs.
Summers	D. W. Ritter	Hinton	B. W. McNeer	Hinton	3rd Mon.
Taylor	Paul P. Warden	Grafton	R. D. Stout	Grafton	Last Thurs.
Wetzel	Lemoyne Coffield	New Martinsville	C. P. Watson, Jr.	New Martinsville	Monthly
Wyoming	Ward Wylie	Mullens	Mario Cardenas	Mullens	Quarterly

licensed to practice in West Virginia in 1947 and located for practice in Marlinton that same year.

He was a member of the Greenbrier Valley Medical Society, the West Virginia State Medical Association and the American Medical Association.

Besides his widow, he is survived by a son, Charles K., Jr., a student at Admiral Farragut Academy in St. Petersburg, Florida; two daughters, Martha Kay and Elizabeth, at home; five brothers, Gordon of Huntersville, W. B. of Cincinnati, Ohio, and Roscoe, Maynard and Eugene of Marlinton; and two sisters, Mrs. Layman Davis of Marlinton and Mrs. John Bell of Logan.

* * * *

SIXTUS GARY ZANDO, M. D.

Dr. Sixtus Gary Zando, 57, of Williamson, died on April 5, 1961, at a hospital in that city following a long illness.

Doctor Zando was born at Falcade, Italy, on January 28, 1904, son of Robert M. and Catharine Zando. He accompanied his family to America while a young man and attended the public schools in Williamson.

He was graduated from West Virginia University and received his M. D. degree from the Loyola University School of Medicine, in Chicago, in 1936. He had postgraduate work at Johns Hopkins University Hospital.

He was licensed to practice medicine in West Virginia in 1936, and had been affiliated with the Williamson Memorial Hospital since that time. He was also active in public health work in Mingo County for many years.

He was a member of the Mingo County Medical Society, the West Virginia State Medical Association and the American Medical Association. He served a term as president of his local society in 1951.

Besides his widow, he is survived by a son, William K. Zando, a student at Pikeville College, Pikeville, Kentucky; his mother, of Salem, Virginia; one brother, Abe Zando of Williamson; and three sisters, Mrs. David Vecellio of Salem, Mrs. Howard Fiery of Princeton and Mrs. Thomas Bradley of Roanoke.

Progress in Cancer Research and Control

The cancer problem is increasing in magnitude, largely as a result of medical progress in other areas. The outlook for the cancer patient has improved, and further advances may be expected as a result of progress in public and professional education and methods for cancer detection and treatment.

Cancer research is moving at an accelerated pace, particularly in the fields of chemotherapy, epidemiology, and the cancer viruses, in which recent advances offer not only the hope for improved cancer treatment and prevention but also a deeper insight into the nature of the cancer process.—J. R. Heller, M. D., in Journal, Tennessee State Medical Assn.

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County Societies

BARBOUR-RANDOLPH-TUCKER

Dr. Byron M. Bloor of Morgantown was the guest speaker at the regular monthly meeting of the Barbour-Randolph-Tucker Medical Society which was held at the Coach N' Four in Elkins on March 16.

Doctor Bloor, who is associate professor of surgery and chairman of the Division of Neurosurgery of the West Virginia University School of Medicine, presented an interesting paper on "Cord Tumors." He pointed out that the majority of spinal cord tumors are benign, usually occurring in the age group of 30 to 40, and that the symptoms average 2½ to 3 years in duration.

The speaker classified cord tumors as being extradural or intradural and said that the intradural tumors may be extramedullary or intramedullary. He said the former comprises 50 per cent of spinal cord tumors.

Doctor Bloor discussed the mechanism by which symptoms are produced and stated that anterior cord tumors often produce the same symptoms as amyotrophic lateral sclerosis. He stressed the importance of not doing a lumbar puncture if a tumor is suspected, because of the possibility of making the symptoms worse or making it impossible to do a myelogram later when the patient is referred for further study.

The speaker was introduced by Dr. Vernon E. Duckwall.—Charles L. Leonard, M. D., Secretary.

* * * *

CABELL

Dr. Lawrence Beizer of Philadelphia was the guest speaker at the regular monthly meeting of the Cabell County Medical Society which was held at the Hotel Frederick in Huntington on March 9.

Doctor Beizer, who is associate professor of medicine at the University of Pennsylvania School of Medicine, presented a timely and comprehensive paper on the current status of chemotherapy in malignant disease. Several members of the society participated in the question and answer period which followed.

Dr. C. Stafford Clay, the president, presided at the meeting and announced that the application of Dr. Oscar B. Biern for honorary membership had been approved.

Dr. Jack Leckie presented an interim report of the Advisory Committee on Blue Shield Activities, which report was approved by the society.

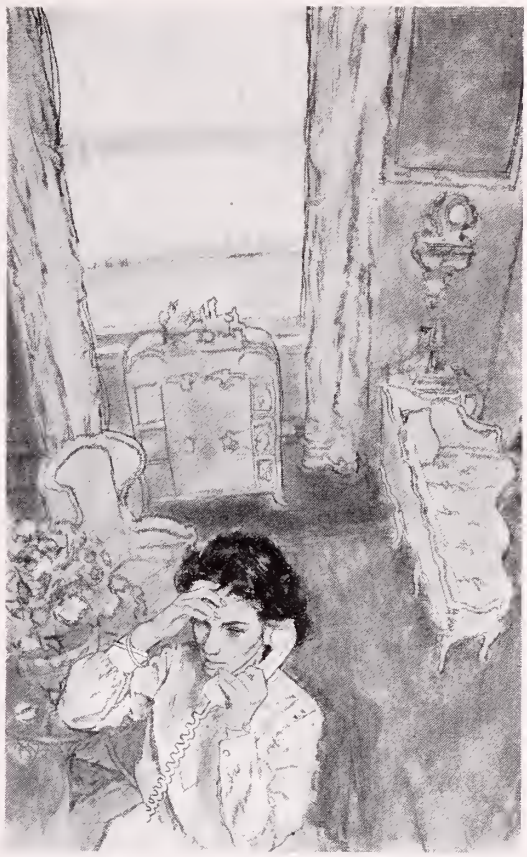
The society also approved a request by Dr. W. R. Wilkinson, co-chairman of the Public Relations Committee, that the society give its approval to a series of "Daily Health Hints" to be broadcast over a local radio station.—W. L. Neal, M. D., Secretary.

* * * *

HARRISON

Dr. David Edwards of Keyser was the guest speaker at the regular monthly meeting of the Harrison County Medical Society which was held at the Stonewall Jackson Hotel in Clarksburg on April 6.

Doctor Edwards, who is a member of the faculty at West Virginia University, presented an interesting talk



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concerning the operation of the University Student Counseling Service and also explained the mechanics of the Mental Health Program. Further explanation was given by Dr. J. J. Lawless of Morgantown, Director of the WVU Health Service. A question and answer period followed.

Dr. R. B. Linger was elected to honorary membership in the Society during the meeting.

The meeting was attended by 31 members and 5 guests.—Andrew J. Weaver, M. D., Secretary.

* * * *

LOGAN

The regular monthly meeting of the Logan County Medical Society was held at the East End Barbecue in Logan on April 12. Dr. Henry K. Bobroff, the president, presided at the meeting which was attended by 14 members and two guests.

Drs. W. C. Davis and Charles K. Rath were in charge of the scientific program. Doctor Davis discussed skin and stomach cancer and Doctor Rath, large bowel cancer from a practical and clinical standpoint.

During the business session, Dr. E. H. Starcher discussed commitment procedures for tuberculous patients in state institutions. The Society also approved, as amended, a supplementary plan to the Maternal and Child Welfare Program.—Charles K. Rath, M. D., Secretary.

* * * *

MERCER

Dr. Charles E. Andrews, Associate Professor of Medicine at the West Virginia University School of Medicine, was the guest speaker before the regular monthly dinner meeting of the Mercer County Medical Society which was held at the University Club in Bluefield on March 20, with the president, Dr. Henry F. Warden, Jr., presiding.

The speaker discussed the diagnosis and treatment of symptomatic fungus diseases. He pointed out that many cases of tuberculosis were in fact probably histoplasmosis. He said physicians should view with suspicion fungus disease in patients exhibiting draining sinuses, unexplained cavity of the lung field or persistent skin lesions.

At the business meeting preceding the scientific program, Mr. John Pompelli, representative of the AMA Field Service, explained the functions of the American Medical Association, including its many services available upon request.

Dr. L. J. Pace submitted a report concerning the state program for Medical Assistance for the Aged. The Society went on record as approving the actions taken by the Council of the State Medical Association in its efforts to have approved an equitable fee schedule for use in the program.

Dr. John W. Yost, formerly of Algoma, who now resides in Bluefield, was accepted as a member of the Mercer Society by transfer from the McDowell County Medical Society.—John J. Mahood, M. D., Secretary.

* * * *

WYOMING

A joint meeting of the Wyoming County Medical Society and Auxiliary was held at the Cow Shed in Pineville on March 12, 1961.

The secretary read the biographical sketch of Dr. Byron W. Steele of Mullens, who has been nominated by the Society for selection as "General Practitioner of the Year."

A disaster committee will be organized by the Society, with Dr. Ward Wylie serving as chairman.

Dr. R. C. Hatfield of Oceana was elected vice president to serve the unexpired term of the late Dr. C. T. Upchurch of Oceana.—Mario Cardenas, M. D., Secretary.

The Stakes Are High—And They're Yours!

The philosophy of the people of the United States appears to be changing, and probably the philosophy of the individual physician is also changing. It is your duty, as it is of all physicians, to prepare yourselves to cope with the situations which may arise and always consider what is best for the patient and for the highest type of medical practice, irrespective of the pressure which outside groups may place upon you.

It is the feeling of the majority of physicians that the individual voluntary type of medical practice, whereby the individual has the right to select his own physician and the physician to select his own patient, is the best way. It is this type philosophy, the system of free enterprise, which has made America the great nation it is and American medicine what it is today.

Today the philosophy and the nature of the American people seems to have changed. The individual seems to be becoming a "leaner," with the desire to "let George do it" and "let my neighbor take care of me and mine." This country has been built by rugged individuals working harmoniously for the betterment of a society that would benefit all.

One of the ways we can help maintain our system of medical practice is to discourage our patients from abusing their hospital insurance and using it excessively. As the costs of medical care have risen, it has been found that hospital care and other auxiliary care has risen much faster than have actual medical or physicians' fees. Excessive use of hospital insurance inevitably results in higher and eventually prohibitive costs of this insurance, and this voluntary health insurance is one of our main weapons in our fight against socialization of medical practice. Therefore, it is to our definite advantage, particularly in the long run, to try to discourage this abuse which we are so often now encountering. The stakes are high—and they're yours!! Milford B. Hatcher, M. D., in Journal, Medical Association of Georgia.

PG Course in Internal Medicine

A postgraduate course in "Current Aspects of Internal Medicine," sponsored by the American College of Physicians, will be held at the University of Iowa School of Medicine in Iowa City, Iowa, June 19-23. The director of the five-day course will be Dr. William B. Bean.

Further information may be obtained by writing the American College of Physicians, 4200 Pine Street, Philadelphia 4, Pennsylvania.

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Parliamentarian: Mrs. Claude R. Davisson, Weston

HANCOCK

Mrs. E. M. Clubb, Jr., was elected president of the Woman's Auxiliary to the Hancock County Medical Society at a meeting held at the Williams Country Club in Weirton on March 21. Mrs. Thomas G. Harper was elected secretary-treasurer.

Mrs. Earl S. Phillips of Wheeling, regional director and fourth vice president of the State Auxiliary, was an honor guest at the meeting and installed the new officers. The Auxiliary also voted unanimously that the term of officers be changed from one to two years.

Mrs. Arthur M. Phillips, health careers chairman, announced that application blanks have been distributed to all high schools in the county. It was also announced that the annual Doctor's Day dinner would be held at the Williams Country Club on April 8.—Mrs. Eli J. Weller, Correspondent.

* * * *

HARRISON

Mrs. Bernard W. Wilkinson was elected president of the Woman's Auxiliary to the Harrison County Medical Society at the regular monthly meeting which was held at the Stonewall Jackson Hotel in Clarksburg on April 6. Other officers elected to serve during the coming year are as follows:

Mrs. Charles S. Harrison, president elect; Mrs. Paul E. Gordon, vice president; Mrs. J. Keith Pickens, secretary; and Mrs. John D. H. Wilson, treasurer.

Mrs. L. Dale Simmons, legislation chairman of the Woman's Auxiliary to the State Medical Association, presented an interesting report on legislation of interest to the medical profession on the state and national levels.

It was also announced during the meeting that two books on careers in medicine and allied professions have been presented by the Auxiliary to the Clarksburg Public Library.

Mrs. Herman Fischer, the president, presided at the meeting and Mrs. George F. Evans was in charge of arrangements for the program.—Mrs. Paul E. Gordon, Secretary.

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McDOWELL

The annual Doctor's Day Dinner sponsored by the Woman's Auxiliary to the McDowell County Medical Society was held at the Cow Shed in Pineville on March 30.

Mrs. H. A. Bracey, the president, delivered the address of welcome and the invocation was given by Dr. J. Howard Anderson of Welch. A response on behalf of the physicians in attendance at the meeting was given by Dr. George L. Fischer.

Novel Easter hats modeled by wives of physicians, depicting various specialties of medicine, was the feature of the entertainment program.

Mrs. Richard O. Gale served as commentator for the hat show and she was assisted by Mesdames J. Hunter Smith, J. Howard Anderson, and Jorge Ribeiro.—Mrs. J. H. Smith, Correspondent.

* * * *

MERCER

Mrs. Clark K. Sleeth of Morgantown was the guest speaker at a luncheon meeting of the Woman's Auxiliary to the Mercer County Medical Society which was held at the Bluefield Country Club on March 23.

Mrs. Sleeth, who is president of the Woman's Auxiliary to the West Virginia State Medical Association, gave a very interesting talk on activities of the Auxiliary in the state during the current year. She was introduced by Mrs. Robert S. Gatherum, Jr.

It was announced during the business session that the Auxiliary will sponsor a benefit bridge and fashion show at the Appalachian Assembly Room on April 17. Proceeds will be donated to the American Medical Education Foundation.—Mrs. W. F. Hillier, Jr., Correspondent.

* * * *

MINGO

The annual Doctor's Day Dinner, sponsored by the Woman's Auxiliary to the Mingo County Medical Society, was held at the home of Dr. and Mrs. Russell A. Salton, Jr., at Fairview, on March 30.

Addresses of welcome were given by Mrs. Salton and Mrs. W. H. Price, the president, who presided at the dinner meeting. Physicians attending the dinner were given red carnations.

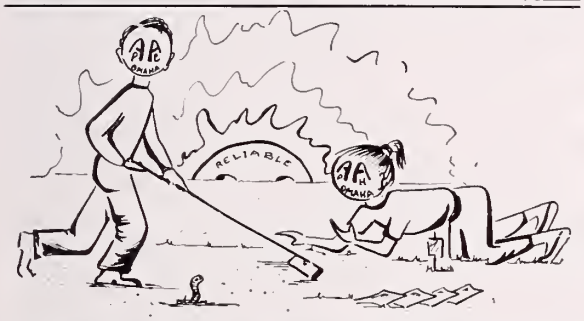
The honor guest was Dr. H. C. Hays of Athens, who formerly practiced in Williamson.—Mrs. Robert J. Tchou, Secretary.

* * * *

MONONGALIA

Mrs. John H. Trotter was elected president of the Woman's Auxiliary to the Monongalia County Medical Society during the regular monthly meeting which was held at the Medical Center in Morgantown on April 4. Other new officers elected for the coming year are as follows:

Mrs. J. W. Hesen, Jr., president elect; Mrs. Charles F. Dent, vice president; Mrs. D. Franklin Milam,



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J. L. RITTMEYER, M. D.
ERNEST G. GUY, M. D.

Pediatrics:
CORA C. LENOX, M. D.

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recording secretary; Mrs. William E. King, corresponding secretary; Mrs. C. A. Smith, parliamentarian; and Mrs. Robert Greco, treasurer.

The guest speaker at the meeting was Dorothy Mae Major, Dean of the WVU School of Nursing. Her subject was "Purposes of the University's New School of Nursing."

Hostesses for the luncheon meeting were Mesdames Edward J. Van Liere, G. Ralph Maxwell, C. C. Romine and George W. Phillips.—Mrs. Maynard P. Pride, Correspondent.

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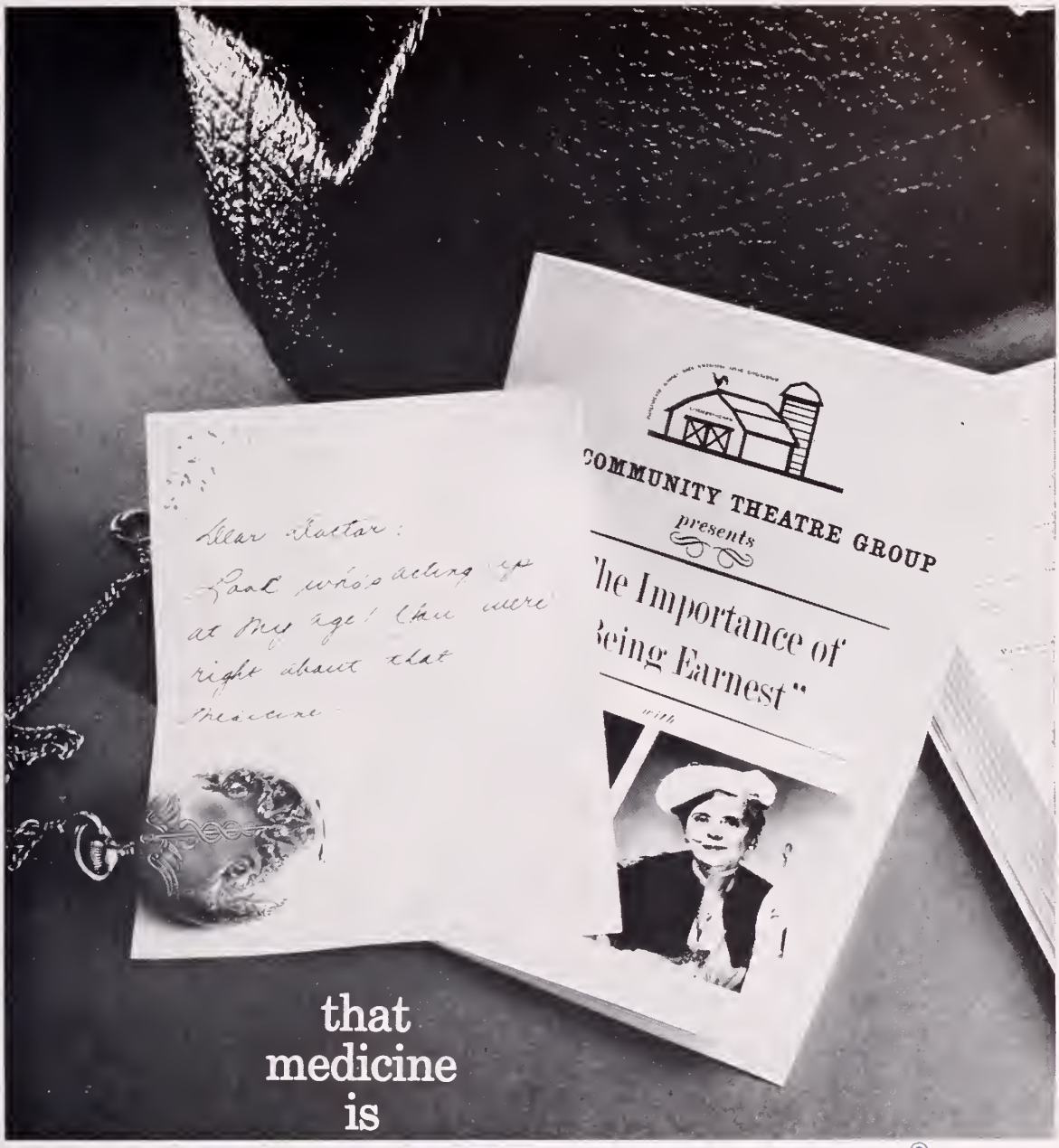

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Book Reviews

STROKE—By Douglas Ritchie. Pp. 192. Doubleday and Company, Inc., 575 Madison Avenue, New York 22, N. Y. 1961. Price $3.50.

Stroke is a vivid account of the author's rehabilitation after a devastating stroke, and is essentially a three-year diary of an intelligent patient's thoughts, actions and partial recovery. It is good reading, because the patient was an author and indeed an active commentator for the British Broadcasting Company. He was 50 years old at the onset of the attack, but had been aware of a hypertensive condition for several years.

Physicians and patients may derive some encouragement from reading this little book. The long, tough rehabilitation was dismally slow, painful and depressing, and was accomplished only with resources within and without, many of which are not available to the average patient, crippled by a stroke.

The author makes it clear in the preface, that the story is about himself alone. It is not a tale of self pity, and is not supposed to represent a program for any other victim. Reading of the book is slow, and any reader may get bogged down in the long list of disappointments, and the cruelly slow progress in any direction. The book does portray a lack of insight into this common affliction, by even a person of unusual intelligence. But it at once becomes apparent that we have a patient of more than average resources, and a wife, who was a jewel beyond price.

The annoyance of the author toward nurse and attendants who babytalked to him, is quite understandable. Also resentment toward people who fail to realize the helplessness of the patient. The need to provide the patient with compatible associates becomes very clear. The author thoroughly and promptly realizes that much of his recovery depends on him and his wife, and rehabilitation is in direct ratio to energy and time expended on prescribed treatment. The author knows he should have received the services of a speech therapist earlier in his disability, but could not communicate the need to doctors, indicating again the inability of the patient to make known his desires.

The physician reader will be deeply interested in the inability of the doctors to develop the proper rapport with the patient, and may approach his own crippled clientele with more patience in the future. The physician, regardless of his medical philosophy, will be deeply impressed with the resources that the National Health Service can assemble to meet this problem. Not all physicians will agree with a treatment that permitted a stroke patient to remain in bed for the entire first month of the illness. But most physicians will appreciate this book, and may gain some direct insight into the patient's situation. Insight, which is not acquired through didactic teaching. The book may also incite more professional interest in the stroke patient.

Patients becoming discouraged by their own plight, may find renewed faith through study of this volume. The strong will be encouraged, the poor in heart may be further depressed.—George F. Evans, M. D.

* * * *

CURRENT THERAPY—1961—Edited by Howard F. Conn, M. D. Pp. 806. Philadelphia and London: W. B. Saunders Company. 1961. Price $12.50.

This 806 page volume appears to be one of the best bargains in the medical book field, and it should serve as a useful reference for all practicing physicians. There are 307 articles, 82 of which are reported by the publishers to be new. There are 313 contributors and 13 special editors, including many distinguished names.

Due to the broad scope of the work, therapy is described in an abstracted form, and controversial material is largely excluded. Taking this into consideration, the therapies listed are complete and current. Practically all of the contributors are recognized as authorities in their fields.

The more recent volumes of "Current Therapy" have included more physiological data, although necessarily brief, introducing the more important categories of disease. More material on surgical diseases and surgical techniques of treatment have also been included. Enlargement of certain sections has been made, including: immunization schedules, congenital heart disease, parenteral fluid therapy and poisonings. There is now a supplement in the back of the book which includes a descriptive roster of all drugs mentioned in the text. This appendix also lists pediatric dosage for most current drugs, apothecary-metric conversion tables, and an excellent table which lists the active ingredients in hundreds of household and commercial products which might cause poisoning.

The editing, printing and proofreading are good. This is not a book of pharmacology, but is a concise and complete guide of practical therapeutics, indexed by disease. As such, it is a very useful reference for the clinician.—John F. Otto, Jr., M. D.

Books Received

MANAGEMENT OF FRACTURES, DISLOCATIONS, AND SPRAINS—By H. Earle Conwell, M. D., F. A. C. S., Associate Professor of Orthopedic Surgery, University of Alabama School of Medicine, Birmingham; and Fred C. Reynolds, M. D., Professor of Orthopedic Surgery, Washington University School of Medicine, St. Louis, Missouri. Pp. 1153, with 1227 illustrations. The C. V. Mosby Company, 3207 Washington Boulevard, St. Louis 3, Missouri. 1961, Seventh Edition. Price $27.00.

* * * *

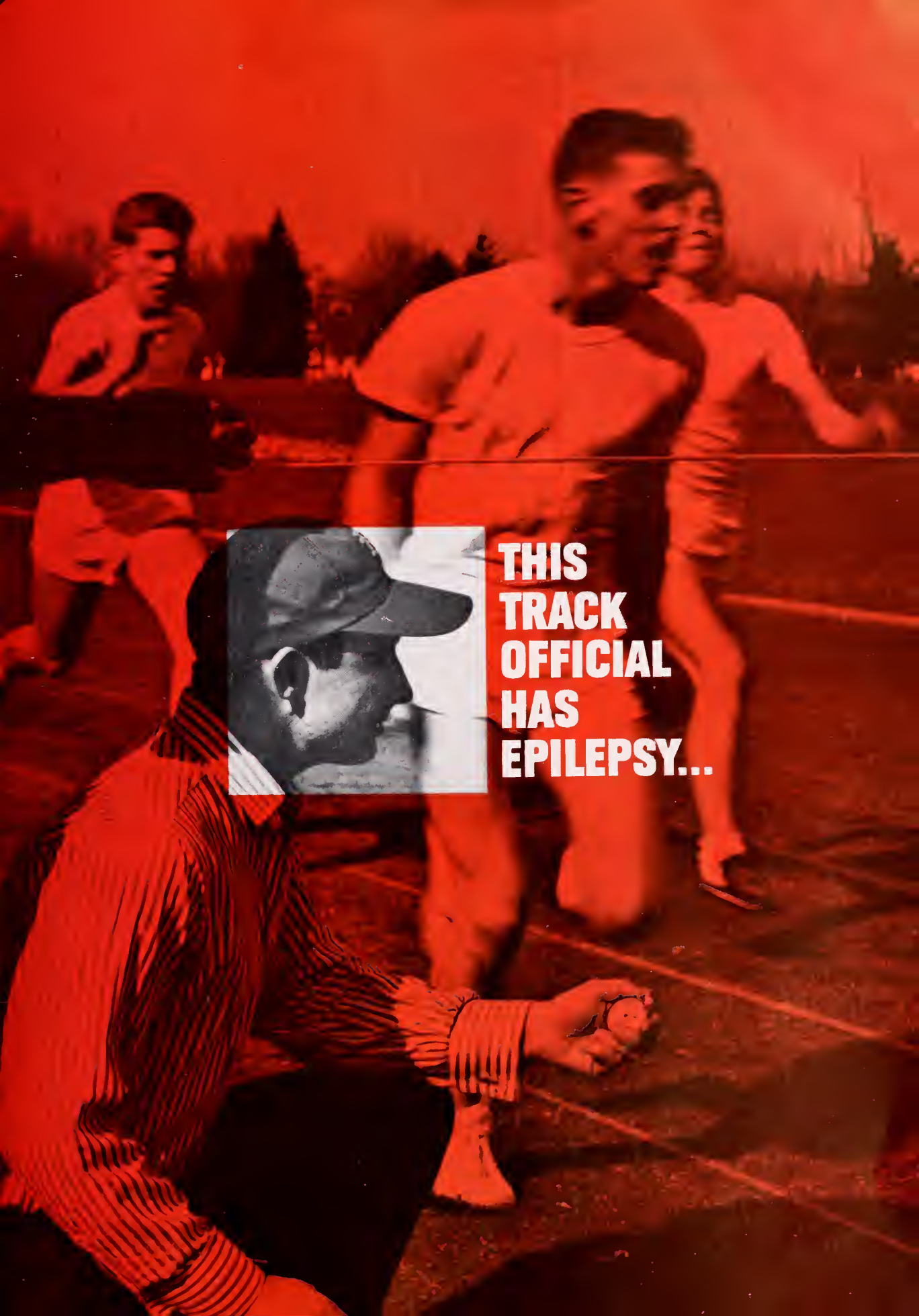
MEDICAL ALMANAC—By Peter S. Nagan, A. B., M. A., M. S. Pp. 528. Philadelphia and London: W. B. Saunders Company. 1961. Price $5.00.

* * * *

MIRAGE OF HEALTH—By Rene Dubos. Pp. 235. Doubleday and Company, Inc., 575 Madison Avenue, New York 22, New York. 1961. Price, $.95.

* * * *

CHILDBIRTH WITH HYPNOSIS—By William S. Kroger, M. D., of Beverly Hills, California, formerly Associate Clinical Professor of Obstetrics and Gynecology at Chicago Medical School. Edited by Jules Steinberg of Chicago, midwest editor for several trade publications. Pp. 216, with illustrations. Doubleday & Company, Inc., 575 Madison Avenue, New York 22, N. Y. 1961. Price $3.95.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JUNE
1961

Vol. 57 No. 6

The WEST VIRGINIA Medical Journal

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Member 1961

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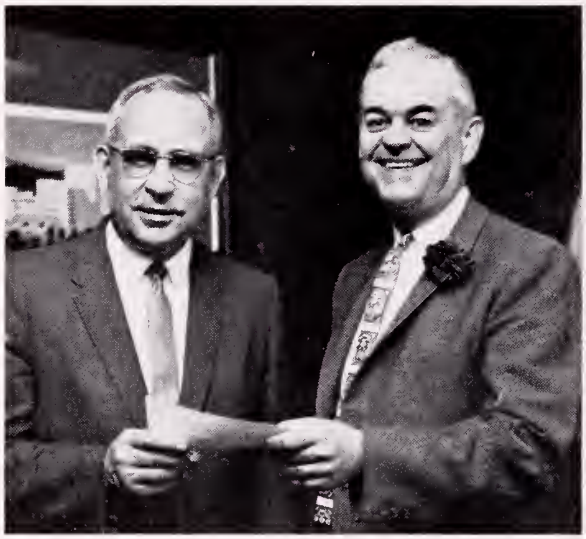
—News—

THE West Virginia University School of Medicine recently received $8,388.10 from the American Medical Education Foundation, which was established in 1951 by the American Medical Association.

Dr. John W. Hash of Charleston, President of the West Virginia State Medical Association, presented the check to Dean Clark K. Sleeth during a ceremony held at the Medical Center in Morgantown on May 14.

The grant to the West Virginia University School of Medicine is part of $1,172,599.60 contributed by physicians to AMEF during 1960 and being distributed now to 85 medical schools throughout the country. Deans of the schools may use the money at their discretion of special projects or expenses outside of their budgets.



The West Virginia University School of Medicine recently received a check for $8,388.10 from the American Medical Education Foundation, which was established by the American Medical Association. Presentation of the check to Dr. Clark K. Sleeth, Dean of the School of Medicine, was made by Dr. John W. Hash of Charleston, President of the State Medical Association, on behalf of the AMEF.

In the past five years the AMEF has given the WVU School of Medicine grants totaling $34,068.07.

Since 1951, physicians have given $10,247,152.60 to the medical schools through the AMEF. For the first five years the money was turned over to the National Fund for Medical Education to be given to the schools. Since 1957 the AMEF has given grants directly to the schools.

AMEF grants represent but a portion of the money contributed annually by physicians to medical schools.

• Compiled from material furnished by Cletis Pride, Public Information Officer, West Virginia University Medical Center, Morgantown, W. Va.

In addition to its AMEF grant, the West Virginia University School of Medicine last year received $2,741.28 in direct gifts from its alumni, part of $4 million in total gifts reported by medical schools.

Doctor Hardy Speaks at Seminar

Dr. James D. Hardy, Professor of Physiology at the University of Pennsylvania School of Medicine and Research Director of the Aviation Medical Acceleration Laboratory at the United States Naval Air Development Center at Johnsville, Pennsylvania, was the guest speaker at a seminar held at the Medical Center in Morgantown on May 5.

Doctor Hardy, who is an authority in the measurements of pain in healthy and diseased persons and studies of fever and body temperatures, discussed "Some Acceleration Problems in Aviation and Space Travel."

The Johnsville Acceleration Laboratory is the site of one of the world's largest human centrifuges, designed to simulate the acceleration and other forces experienced during aviation and space travel. Doctor Hardy's paper included data collected from experiments using the centrifuge.

University Hospital Auxiliary Active

Mrs. Edward J. Van Liere, president of the newly formed "Friends of the West Virginia University Hospital," announced that membership in that organization now exceeds one hundred persons.

She said that the auxiliary members were prepared for hospital service through orientation and training programs by the administrative and nursing staffs. The auxiliary became active less than three weeks after the organization meeting held several months ago.

Membership in the "Friends of the University Hospital" is open to everybody in the state, although the members in Morgantown do the actual physical work. The group now has 28 sustaining members who pay $5 a year and four life members at $100 each.

The first life member was Mrs. John W. Hash of Charleston, wife of the president of the West Virginia State Medical Association. Others are Thomas E. Millsop of Weirton, Dr. and Mrs. Irvin Stewart and Mr. and Mrs. James Coombs, all of Morgantown.

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The Month in Washington

• **From the Washington Office of the American Medical Association.**

THE American Medical Association branded as untrue certain statements by Abraham Ribicoff, Secretary of Health, Education and Welfare, concerning the Administration's legislative proposal to provide medical care for the aged under Social Security.

Dr. F. J. L. Blasingame, executive vice president of the AMA, presented a point-by-point rebuttal in a letter to more than 500 editors throughout the country after Ribicoff addressed the annual meeting of the American Society of Newspaper Editors in Washington.

Ribicoff's Statement Challenged

Dr. Edward R. Annis of Miami, representing the AMA, accused Ribicoff of misrepresenting the role of doctors under the administration proposal. Doctor Annis answered Ribicoff on a radio-television program with Sen. Kenneth B. Keating (R. N.Y.) which was taped in Washington. Ribicoff had made the misrepresentation on an earlier Keating program.

Doctor Blasingame said Ribicoff's statement before the editors that physicians are not included in the administration proposal, the King bill, "simply is not true." The AMA official pointed out that the bill includes interns and residents in teaching hospitals as well as pathologists, radiologists, physiatrists and anesthesiologists working in hospitals or serving hospitals' outpatient clinics.

"Mr. Ribicoff further claims that the King bill provides free choice of hospital physician," Doctor Blasingame said. "The fact is only hospitals signing contracts with the federal government would be available to patients. If the only hospital in a community was not approved by the Secretary of HEW, patients in that community would be forced to seek hospitalization in some other city. That would not afford free choice of hospital. If the patient's physician was not on the staff of the other hospital, the patient would be denied free choice of physician."

Doctor Blasingame also disputed Ribicoff's contention that the King bill is not socialized medicine.

"By common definition, any scheme which calls for a system of compulsory health care which is administered, financed, and controlled by the federal government is socialized medicine for that segment of the population it serves."

AMA Position Supported by Rep. Judd

Rep. Walter H. Judd (R. Minn.), who is a physician, was quoted as one of a number of House and Senate members who agree with the AMA: "The public has been led to believe that they can get government financing without government control and ultimate government operation of medical services. It is naive for anyone to believe that Congress will take the people's money away from them through taxes and then allow the money to be spent by someone else without the Congress maintaining its own firm control."

Pointing out that the nation's physicians always have been in favor of medical care for all regardless of ability to pay, Doctor Blasingame said:

"It seems strange to us that Mr. Ribicoff continues to lobby for the King bill while completely ignoring the Kerr-Mills law, passed by Congress last year with strong support by the nation's physicians.

"The Kerr-Mill Law enables the state to guarantee to every aged American who needs help the health care he requires. And the states are implementing the law with unprecedented swiftness."

Doctor Annis pointed out on the radio-television program that "doctors would work for the government by working for the hospitals under contract to the government." He said those doctors would work "under rules, regulations and controls prescribed and laid down" by the HEW.

Krebiozen Evaluation

The Department of Health, Education and Welfare has agreed to make an impartial evaluation of the controversial cancer drug Krebiozen.

U. S. District Judge Julius H. Miner of Chicago requested the evaluation before proceeding with a $300,000 libel suit filed by Andrew C. Ivy, M. D., a leading endorser of the drug, against George D. Stoddard, Ph.D., chancellor of New York University and former president of the University of Illinois.

In a letter to HEW Secretary Ribicoff, Judge Miner said:

"In my humble judgment, Krebiozen has too long been a controversial subject and the American public deserves that it be examined under neutral supervision and by the most competent experts in whom the people have implicit confidence."

Ribicoff said the National Cancer Institute would evaluate the drug when its sponsors presented the necessary data. But, he said, "any decision to undertake a study with human cancer patients must await, and depend on, the results of the evaluation of the existing clinical data."

County Societies

BARBOUR-RANDOLPH-TUCKER

Dr. Richard L. Day of Pittsburgh was the guest speaker at the regular monthly meeting of the B-R-T County Medical Society which was held at the Philippi Inn in Philippi on April 20. He was introduced by Dr. Cora C. Lenox.

Doctor Day, who is Professor and Chairman of the Department of Pediatrics at the University of Pittsburgh School of Medicine, presented an interesting paper on "Hyperbilirubinemia in Infants."

Dr. J. L. Rittmeyer, the president, presided at the meeting and appointed the following physicians as members of the Public Service Committee: Dr. Charles L. Leonard, chairman, and Drs. Hu C. Myers, S. M. Lilienfeld, E. D. Moyers and T. L. Woodford.—Charles L. Leonard, M. D., Secretary.

* * * *

HARRISON

Dr. Harry T. Linger was elected president of the Harrison County Medical Society at the regular monthly meeting which was held at the Stonewall Jackson Hotel in Clarksburg on May 4. Other new officers for the coming year are as follows:

Dr. Andrew J. Weaver, president elect; Dr. A. Robert Marks, secretary; and Dr. Robert S. Wilson, treasurer.

The new officers, together with the following members, will serve as members of the Board of Directors: Drs. Richard K. Hanifan, Jack T. Gocke and L. E. Neal.

Reports of activities of committees during the past year were presented during the meeting, which was attended by 29 members.—Andrew J. Weaver, M. D., Secretary.

* * * *

LOGAN

Dr. Edmund B. Flink of Morgantown was the guest speaker at the regular monthly meeting of the Logan County Medical Society which was held at the East End Barbecue in that city on May 10.

Doctor Flink, who is Professor and Chairman of the Department of Medicine at the WVU School of Medicine, presented an interesting paper on "Complications of Duodenal Ulcer." A question and answer period followed his presentation.

During the business meeting, the following physicians were named delegates to the Annual Meeting of the State Medical Association at The Greenbrier in August: Drs. Henry K. Bobroff, Harold Van Hoose and Charles K. Rath. Alternates are Drs. Thomas P. Long and Everett H. Starcher.

Dr. Henry K. Bobroff, the president, presided at the meeting.—Charles K. Rath, M. D., Secretary.

* * * *

McDOWELL

The regular monthly meeting of the McDowell County Medical Society was held at the Stevens Clinic

OFFICERS OF COMPONENT SOCIETIES

Society	President		Secretary		Meetings
Barbour-Randolph-Tucker	John L. Rittmeyer	Philippi	Charles L. Leonard	Elkins	3rd Thurs.
Boone	W. L. Barbour	Whitesville	H. H. Howell	Madison	2nd Wed.
Brooke	James E. Wise	Follansbee	H. L. Hegner	Wellsburg	
Cabell	C. Stafford Clay	Huntington	W. L. Neal	Huntington	2nd Thurs.
Central West Virginia	Harold D. Almond	Buckhannon	R. L. Chamberlain	Buckhannon	As Scheduled
Eastern Panhandle	Jules F. Langlet	Charles Town	F. A. Hamilton, Jr.	Martinsburg	2nd Wed.
Fayette	W. P. Bittinger	Summerlee	Ivan H. Bush, Jr.	Oak Hill	1st Wed.
Greenbrier Valley	Eugene McClung	Lewisburg	E. L. Crumpacker	White Sul. Spgs.	2nd Wed.
Hancock	E. M. Clubb, Jr.	Weirton	Edward A. Gretchen	Weirton	2nd Tues.
Harrison	Richard V. Lynch, Jr.	Clarksburg	Andrew J. Weaver	Clarksburg	1st Thurs.
Kanawha	William B. Rossman	Charleston	A. B. Curry Ellison	Charleston	2nd Tues.
Logan	Henry Bobroff	Man	Charles K. Rath	Logan	2nd Wed.
Marion	S. L. Stillings	Mannington	G. Thomas Evans	Fairmont	Last Tues.
Marshall	H. B. Ashworth	Moundsville	J. W. Myers	Moundsville	Semi-Ann.
Mason	Lewis D. Telle	Pt. Pleasant	Dan Glassman	Pt. Pleasant	Bi-Monthly
McDowell	Louis Vega	Welch	George L. Fischer	Welch	2nd Wed.
Mercer	Henry F. Warden, Jr.	Bluefield	John J. Mahood	Bluefield	3rd Mon.
Mingo	A. H. Henderson	Williamson	Robert J. Tchou	Williamson	2nd Wed.
Monongalia	R. J. Nottingham	Morgantown	C. C. Romine	Morgantown	1st Tues.
Ohio	S. S. Bobes	Wheeling	H. G. Dickie	Wheeling	4th Tues.
Parkersburg Academy	William E. Gilmore	Parkersburg	Robert C. Lincicome	Parkersburg	1st Thurs.
Potomac Valley	H. Luke Eye	Franklin	Philip G. Staggers	Keyser	2nd Wed.
Preston	D. R. Davis	Kingwood	C. Y. Moser	Kingwood	4th Thurs.
Raleigh	Harry F. Cooper	Beckley	Thomas L. Martin	Beckley	3rd Thurs.
Summers	D. W. Ritter	Hinton	B. W. McNeer	Hinton	3rd Mon.
Taylor	Paul P. Warden	Grafton	R. D. Stout	Grafton	Last Thurs.
Wetzel	Lemoyne Coffield	New Martinsville	C. P. Watson, Jr.	New Martinsville	Monthly
Wyoming	Ward Wylie	Mullens	Mario Cardenas	Mullens	Quarterly

Hospital in Welch on April 12. Dr. Louis A. Vega, the president, presided at the meeting which was attended by 18 members and five guests.

During the business meeting, the Society voted to sponsor a child at Camp Kno-Koma, a summer camp for diabetic children in Kanawha County. Several members also discussed the proposal to place physicians under Social Security and it was ordered that a poll be conducted among members on this question.—George L. Fischer, M. D., Secretary.

* * * *

MERCER

Dr. John W. Hash of Charleston, president of the West Virginia State Medical Association, was the guest speaker at the regular monthly meeting of the Mercer County Medical Society which was held at the University Club in Bluefield on April 17.

Doctor Hash discussed activities of the State Medical Association during the past few months and outlined in detail the work that has been done in implementing the Medical Assistance for the Aged Program in West Virginia. He said that physicians and the citizens of the state have a right to be proud of the program now in operation.

He also urged physicians to give their wholehearted support to voluntary pre-payment medical plans as a deterrent to passage of Forand-type legislation.

Dr. Henry F. Warden, Jr., the president, presided at the meeting which was preceded by a social hour and dinner.—John J. Mahood, M. D., Secretary.

OHIO

Dr. William J. Steger was elected president of the Ohio County Medical Society at the regular monthly meeting which was held in Wheeling on April 25. Other new officers for the coming year are as follows:

Dr. Charles H. Hiles, president elect, Dr. M. A. Gaydosh, vice president; Dr. H. G. Dickie, Jr., secretary; and Dr. David W. Palmer, treasurer.

Elected as delegates to the annual meeting of the West Virginia State Medical Association at The Greenbrier in August were Drs. M. B. Williams, Earl S. Phillips, Thomas L. Thomas, W. C. Boggs, C. B. Buffington and R. D. Gill.

The alternates are Drs. Bradford McCuskey, R. U. Drinkard, R. W. W. Phillips, H. G. Weiler and Nime K. Joseph.

The quest speaker at the meeting was Dr. John W. Hash of Charleston, president of the West Virginia State Medical Association, who presented an interesting talk on past, present and future legislation affecting the medical profession.

He pointed out that it was important that physicians contact their representatives in Congress to make known their opposition to passage of Forand-type legislation.—William H. Hagedorn, Jr. Executive Secretary.

When a man sits with a pretty girl for an hour, it seems like a minute. But let him sit on a hot stove for a minute—and it's longer than any hour. That's relativity.—Albert Einstein.

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Woman's Auxiliary

to the

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President Elect: Mrs. Vernon L. Dyer, Petersburg
First Vice President: Mrs. C. Stafford Clay, Huntington
Second Vice President: Mrs. George A. Curry, Morgantown
Third Vice President: Mrs. P. A. Tuckwiller, Charleston
Fourth Vice President: Mrs. Earl S. Phillips, Wheeling
Treasurer: Mrs. Andrew J. Weaver, Clarksburg
Recording Secretary: Mrs. Rupert W. Powell, Fairmont
Corresponding Secretary: Mrs. C. A. Smith, Morgantown
Parliamentarian: Mrs. Claude R. Davisson, Weston

HARRISON

Mr. James P. Robinson was the guest speaker at the regular monthly meeting of the Woman's Auxiliary to the Harrison County Medical Society which was held at the Stonewall Jackson Hotel in Clarksburg on May 6.

Mr. Robinson, a local attorney, spoke briefly on "Law Day U. S. A." He also showed an interesting film on "Our Basic Civil Rights."

Mrs. C. R. Davisson of Weston, parliamentarian of the State Auxiliary, installed the following officers for the coming year:

Mrs. Bernard Wilkinson, president; Mrs. C. S. Harrison, president elect; Mrs. Paul E. Gordon, vice president; Mrs. J. Keith Pickens, secretary; and Mrs. J. D. H. Wilson, treasurer.

Mrs. Herman Fischer, the retiring president, presided at the meeting.—Mrs. Paul E. Gordon, Secretary.

* * * *

MARION

Mrs. J. J. Jenkins, Jr. was installed as president of the Woman's Auxiliary to the Marion County Medical Society at the May meeting which was held at the Elks Club in Fairmont. Other new officers for the coming year are as follows:

Mrs. Paul S. Gotses, president elect; Mrs. William A. Ehrgott, vice president; Mrs. William T. Lawson, corresponding secretary; Mrs. Robert G. Janes, recording secretary; and Mrs. J. J. Coogle, treasurer.

Mrs. John D. Lindsay, the retiring president, presided at the meeting and the new officers were installed by Mrs. John P. Helmick, a past president of the State Auxiliary.—Mrs. J. J. Google, Correspondent.

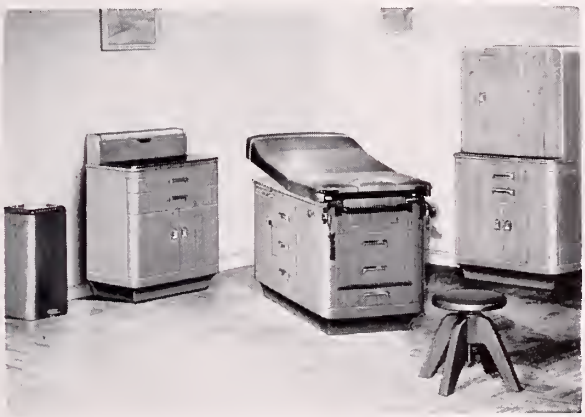
* * * *

McDOWELL

More than 100 members of the Future Nurses of America Clubs in McDowell County were guests of the Woman's Auxiliary to the McDowell County Medical Society at a Tea held in Welch on April 12.

Mrs. H. A. Bracey, the president, presided and discussed the many rewarding aspects of the nursing

Hamilton achieved it, and we've got it for you . . .



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profession. Mrs. A. J. Villani, chairman of the state and county Scholarship Committee, outlined the manner in which students should apply for loans and scholarships during their nursing training.

Mrs. Dante Castrodale was in charge of the Committee on Arrangements and she was assisted by Mesdames F. L. Johnston, Kenneth N. Byrne, H. T. Schiefelbein, R. H. Edwards, Louis A. Vega, and E. D. Gibson.—Mrs. J. Hunter Smith, Secretary.

* * * *

MINGO

Mrs. Russell A. Salton was elected president of the Woman's Auxiliary to the Mingo County Medical Society at a meeting held at the Mountaineer Hotel in Williamson on March 27. Other new officers for the coming year are as follows:

Mrs. Frank J. Burian, president-elect: Mrs. Andrew H. Henderson, vice president; Mrs. F. C. Wyttenbach, secretary; and Mrs. J. E. Johnson, treasurer.

Mrs. W. H. Price, the president, presided at the luncheon meeting and she reviewed projects undertaken during the past year by members of the Auxiliary. She also read a letter from Dr. Clark K. Sleeth, Dean of the West Virginia University School of Medicine, in which he thanked the Auxiliary for a contribution to the American Medical Education Foundation, earmarked for the WVU School of Medicine.

Mrs. Price announced that the final meeting of the year would be held on May 25.—Mrs. Robert J. Tchou, Secretary.

* * * *

RALEIGH

Mrs. Harry F. Cooper was installed as president of the Woman's Auxiliary to the Raleigh County Medical Society at the May meeting which was held at the home of Dr. and Mrs. R. G. Broaddus in Beckley. Other new officers for the coming year are as follows:

Mrs. Richard G. Starr, president elect; Mrs. Ross P. Daniel, vice president; Mrs. Perry Futterman, recording secretary; Mrs. F. L. Banks, corresponding secretary; and Mrs. Preston C. Davis, treasurer.

Mrs. Sherl J. Winter, retiring president, presided at the meeting and the officers were installed by Mrs. Grover C. Hedrick.

Scrolls were awarded to members of the Auxiliary who have been members 15 years or more.—Mrs. James M. Coram, Chairman, Press and Publicity.

Accommodating the Living

Every age and generation must be free to act for itself in all cases as the ages and generations which preceded it. The vanity and presumption of governing beyond the grave is the most ridiculous and insolent of all tyrannies. . . . It is the living, and not the dead that are to be accommodated.—Thomas Paine.

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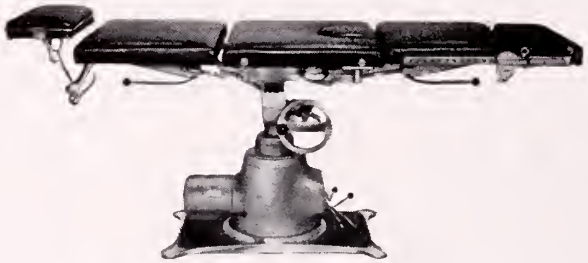

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Book Reviews

OBSTETRICS—By J. P. Greenhill, M. D., F. A. C. S., F. I. C. S. (Hon.), Senior Attending Obstetrician and Gynecologist, The Michael Reese Hospital; Obstetrician and Gynecologist, Associate Staff, The Chicago Lying-in Hospital; Attending Gynecologist, Cook County Hospital; and Professor of Gynecology, Cook County Graduate School of Medicine. Pp. 1098 with 1219 illustrations on 903 figures. Twelfth Edition. W. B. Saunders Company, West Washington Square, Philadelphia 5, Pa. 1960. Price $17.00.

This latest of the "full-sized" textbooks on obstetrics is the modern version of the old standard textbook by Joseph B. DeLee, M. D. This twelfth edition of Doctor DeLee's great classic and the fifth edition by the present author is an entirely modern book with little remaining of the DeLee book except a few standard illustrations. Twenty chapters are written by others than Greenhill and these contributors are of such caliber that they are recognized leaders in their specialty subjects.

The new chapters contain valuable and up-to-the-minute data dealing with the physiology and biochemistry of the placenta, nutrition in pregnancy, endocrine changes in normal pregnancy, the mechanism of labor in cephalic presentation, obstetric roentgenology, the psychology of pregnancy, labor and the puerperium, the toxemias of pregnancy, diseases of the heart, circulatory system, blood, digestive tract, kidneys, lungs, eyes, ears, nose and throat, nervous system, endocrine diseases, fetal erythroblastosis, diseases of the chorion, pathology of the newborn, brain injury and it sequels, and medicomoral problems.

Sixty of the 80 chapters were written by Greenhill and are in his easily digestible style, entirely free of forbidding turgidity. Especially the chapter on birth mechanisms is a clear, straight-forward account with abundant illustrations to clarify the fundamentals. While it is impossible to comment on all the new chapters, the more valuable ones are as follows:

"Physiology and Biochemistry of the Placenta" by Ernest W. Page; "Nutrition in Pregnancy" by Bertha S. Burke and Samuel B. Kirkwood; the two chapters dealing with the endocrine changes in pregnancy by M. Edward Davis and E. Jugen Plotz; "Obstetric Roentgenology" by Robert Berman; "Fetal Erythroblastocis" by Israel Davidson; and "Diseases of the Chorion" by H. Acosta-Sison.

The section on Pathology of Pregnancy occupies 300 pages with excellent chapters on toxemias, the praevias and abruptio placenta. McCartney covers toxemia with such thoroughness that it is completely modern in symptomatology, pathology and therapy. While the section on Pathology of Labor is complete, the conservative treatment of transverse lie and compound presentation is commendable because any textbook should describe these complications in minute detail and give the reasons for conservatism. Most of these

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complications are, however, treated with cesarean section and the procedure performed without a test of labor or too much abdominal manipulation. Greenhill describes metreurysis and colpeurysis in some detail and has complete illustrations on passing the metreurynter. He also gives the indications and conditions for this procedure, and in the same paragraph condemns the procedure with a description of the dangers and disadvantages, one of which was, "repeated manipulations in inserting the bag which may extend for days and usually causing infection." He also mentions prolapse of the cord and possible rupture of the uterus. This archaic procedure clouds the fresh modern trend of this book and could well have been omitted. The reviewer observed one insertion of the uterine bag to effect labor during his internship and the bloody results convinced him that further knowledge of this procedure was useless and redundant.

"Medicomoral Problems" by the late Herbert E. Schmitz is a welcome clarification of this little explained Roman Catholic concept of natural law. Drawing heavily on the writing of Gerald Kelly, S.J., he explains that the two most general precepts of natural law are: "do good" and "avoid evil." The former is called an affirmative law, the latter a negative law. The principles of good and evil are explained but also it is admitted that there is a reasonable limit to a man's duty to care for his health, of a physician's duty to care for his patient, and of a married couple's duty to have children and so forth.

While the purchase price seems high, it seems modest enough for this giant-sized edition. This is an easily readable work which so completely covers the subject that it will be a welcome and richly rewarding source of instruction to both graduate and postgraduate students—Frederick H. Dobbs, M. D.

* * * *

EPIDEMIC—By Frank G. Slaughter. Pp. 286. Doubleday and Company, Inc., 575 Madison Avenue, New York 22, New York. 1961. Price $4.50.

If a physician reader can struggle through the implausible first chapter of this volume of scientific fiction he will probably enjoy another physician's vivid description of the onset, cause and culmination of an epidemic of bubonic plague occurring in New York City.

In the first few pages I encountered several elements in the story plot which were ingested with diffi-

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W. B. Saunders Company features the following recent books in their full-page advertisement appearing on p. vii in this issue:

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culty and with disbelief as to the possibility of their occurrence.

The skipper of a freighter entering New York harbor is convinced he has but a few hours to live as the result of having contacted a dread disease from exposure to infected seamen coming abroad at a tropical port without health cards. He has watched several crew members die in passage and is fully aware of the presence of a deadly disease aboard.

What does he do under these circumstances? No, he did not report this serious matter to quarantine officers; he erased certain entries in the ship's log, a rather unusual step and easily detected by a public health officer. The quarantine officers are apparently both naive and incompetent in that they fail to suspect anything abnormal in presence of acute illness in the crew, even in the physical condition of the skipper. He is allowed to tie up to a pier with a charnel ship completely rigged with a complement of infected rats and plague victims. He staggers ashore for a rendevouz with sex and death, leaving a saddenly intoxicated first officer in command.

In chapter two we are introduced to the basic scientific and romantic elements in the plot, two medical men and one nurse. This type of thing is expected and desirable, but I rather questioned the statement that a young surgeon, evidently employed for one year as chief resident in surgery, would have the professional experience and the ability to command full house attendance at a Sunday morning operative schedule. At least, the description of brain surgery was ample and identified the author as being well-informed in such matters.

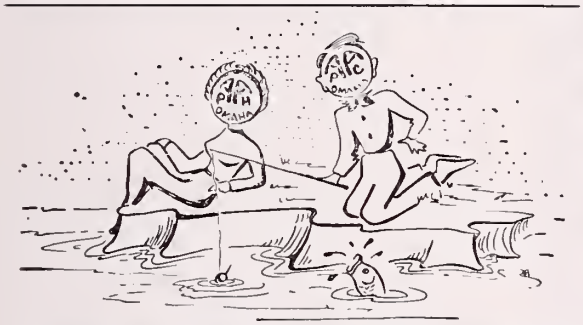
There are several other rather implausible factors, such as the marked influence of one wealthy old codger in the affairs of a general hospital, but after struggling through this introductory melange of federal law violation, official incompetence and carelessness, alcoholic excess plus sex, somewhat purified by the presence of a three-way romance, the reader should enjoy the story of what could happen when the disaster of epidemic plague strikes.

Moral: Do not let an unpalatable first course spoil your entire dinner.—James S. Klumpp, M. D.

* * * *

METABOLIC EFFECTS OF ADRENAL HORMONES—Transcript of a Conference on Adrenal Hormones, held in England on July 15, 1960, and sponsored by Ciba Pharmaceutical Products, Inc. Little, Brown and Company, Boston, Massachusetts. 1960.

This booklet is a 103-page transcript of a Ciba-sponsored Conference on Adrenal Hormones, held in England on July 15, 1960, and attended by 27 British and American physicians, physiologists and biochemists. This conference officially honored Harvard Professor George Thorn, noted for his studies in Addison's Disease. In an unofficial but very real sense, it also honored Yale's Professor C. N. H. Long whose classic work on the metabolic effects of adrenal extracts, performed 21 years ago, still stands unblemished and true



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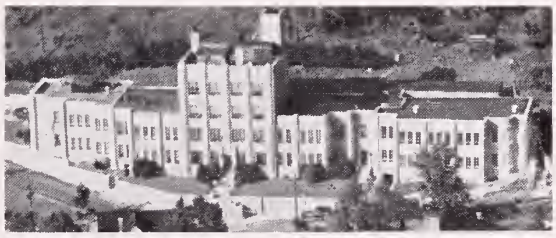

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despite many recent experiments, using purified hormones and more refined chemical techniques.

The bulk of the book is taken up by the presentation of five physiological papers, in which animal experiments are used to delineate special adrenal effects on the metabolism of carbohydrate, protein, or fat. These experiments were carefully designed, with their limited objectives successfully completed and studiously analyzed. Their reading provides satisfaction for those with respect for the scientific method applied to biology, but contributes little to clinical practice.

The accumulating wealth of detail on adrenal activities serves chiefly to demonstrate how much must still be learned. The steroids have multiple simultaneous effects on numerous enzymatic systems in various metabolic pathways. To date it has been possible only to pick piecemeal into these complex actions, and there is no "unified theory" to explain pharmacologic effects. Of chief interest to the clinician is the fact that none of the known metabolic effects of steroids can explain their very potent anti-inflammatory behavior in the intact animal or suffering patient. This ignorance, of course, does not detract from the fascination of the subject under study.

Following the scientific papers, there is a 21-page General Discussion, in which some clinical aspects of adrenal physiology receive mention. As a whole, the book will appeal chiefly to the physician with an investigative bent or an endocrinologic interest.—John F. Otto, Jr., M. D.

THE FAMILY HANDBOOK OF HOME NURSING & MEDICAL CARE—By I. J. Rossman, M. D., Ph. D., Chief of Professional Services, Home Care Department, Montefiore Hospital, New York City; and Doris R. Schwartz, R. N., Assistant Professor in Outpatient Nursing, The Cornell University—New York Hospital School of Nursing, New York City. Pp. 519. Doubleday & Company, Inc., (A Dolphin Reference Book), 575 Madison Avenue, New York 22, N. Y. 1958. Price $1.45.

This rather thick, pocket-sized reference book, written primarily for patients and their families, contains a tremendous amount of information and good advice. The book is divided into seven parts and the first five parts are divided into twenty one separate chapters. There are five hundred and eight pages, plus an index. The division of this book in parts is as follows:

(1) Health in the Family, (2) The Patient in the Home, (3) The Sick Child, (4) Heart and Circulation Problems, (5) Other Major Medical Problems, (This is divided into chapters 15 to 21 as follows: living with an ulcer, diabetes, facts and fears about arthritis, tuberculosis and other lung diseases, mental health and mental illness, cancer and nervous system diseases), (6) Emergency First Aid in the Home, and (7) Guide to Home Nursing Methods and Procedures (alphabetically arranged).

It was surprising to this reviewer how completely the authors were able to cover these subjects from the standpoint of care of the patient in the home. In part seven the guide to home nursing methods and procedures is meticulously detailed and there are line draw-

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ing illustrations of some very ingenious tricks to be used in making the nursing care less burdensome and the comfort of the patient much greater. Numerous tables throughout the book bring information to the reader in concentrated form and the language used is clear-cut and concise. The ten pages of index seem to be very adequate and to provide satisfactory direction to the coverage of subjects sought.

The paper in this book is typical of the paper bound books and the printing is small and close together but this certainly is of necessity in order to provide the tremendous amount of advice and value received in such a reference book for $1.45. The book is recommended to families with invalids and any nurses who do home nursing care. It may be added that this reviewer is glad to have it in his library.—E. Lyle Gage, M. D.

* * * *

A MANUAL OF CUTANEOUS MEDICINE—By Donald M. Pillsbury, M. D., Professor and Chairman of Department of Dermatology, University of Pennsylvania School of Medicine; Walter B Shelley, M. D., Professor of Dermatology, University of Pennsylvania School of Medicine; and Albert M. Kligman, M. D., Professor of Dermatology, University of Pennsylvania School of Medicine. Pp. 430, with numerous illustrations. Philadelphia and London: W. B. Saunders Company. 1961. Price $9.50.

This is an age in which many doctors are prone to believe that textbooks are out-of-date as soon as they are written. Not so with this dynamic little volume of dermatology which is refreshingly called "Cutaneous Medicine." It is a compact little manual that fits well on a busy desk and most remarkable of all at first glance are the unusual diagrams and pictures which have been chosen with great care. A text may age quickly but pictures are timeless. These in particular are unusually clear and represent a very critical selection on the part of the authors.

The presentation of the clinical aspects of the various diseases is extremely well done. But this is to be expected from men such as Pillsbury, Shelley and Kligman who are top clinicians in the field of dermatology. Unfortunately, with the passage of time treatments come and go and one must keep abreast of changes and new methods. It is for this reason that the reviewer finds difficulty in accepting a substantial part of the therapy outlined by the authors. It is their feeling that where indicated ACTH and steroids should be withheld until other forms of treatment have been tried. This is very unreasonable thinking inasmuch as many "man hours" of suffering can be avoided by the judicious use of these hormones.

Some old time therapy is unfortunately recommended in the volume, namely, the use of soaks and calamine lotion. These are distinctly passe today for even an acute weeping condition, such as poison ivy dermatitis, can be treated with a hydrophilic steroid ointment with or without dressing much better than with wet dressings or a lotion. Calamine lotion is almost insufferable to the average patient due to its drying effect which brings on undesirable crusting and concomitant discomfort. The reviewer has used calamine lotion only once in the past five years and only then with the addition of a steroid. Of course wet dressings are valuable where a certain temperature is desired, as hot wet packs in boils. But one must remember that no dermatitis is involved in treating a boil.

The penalty for writing a good book is that invariably errors creep in with the greatest of ease. I envy anybody who writes well, for easy reading is hard writing. The tremendous task of reading and rereading, editing and re-editing makes the writing of a book a formidable undertaking and it is amazing that more errors don't find their way into print. However, there is one slight oversight the reviewer noted on page 100, line 28. The authors suggest prednisone cream for therapy in a certain skin condition. There happens to be no such cream for topical use as prednisone, like cortisone, is inactive when applied locally. What the authors had reference to was in all probability prednisolone cream.

The handling of atopic eczema by the authors is most commendable. However, the fatalistic attitude toward allergy in these cases cannot be shared by the reviewer. To be sure allergic testing is but one form of investigation in any disorder, skin or otherwise. But in a condition as difficult to control as atopic eczema every conceivable approach should be explored.

One should not send such a case to an allergist for treatment but more for study in the hope that some important allergic facet might be uncovered. Too often, however, these patients are found allergic to various foods and inhalants the removal of which does not seem to influence the course of the disease. Perhaps the fault is with us and not the offending allergen.

To the budding dermatologist this book is well worth its price in pictures alone. To the older dermatologist there is felt a deep sense of appreciation for the depth of wisdom exhibited by the authors. Finally, the book is not only a compliment to these men but also to the publisher whose judgment as to type of print, spacing and presentation of subject matter is well known to anybody who has ever examined a Saunders book.—R.O.H.

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I'm insulted when mail brings a cheaply printed circular offering cut-rate drugs. Most of the stuff offered is by generic name and it is cheap. Presumably the quality is open to question. But what bothers most is the offer of a prize of some sort for ordering in quantity. You buy $500 worth of their drugs and they give you a fairly expensive piece of jewelry, (bearing a brand name!)

The scale of orders and prize merchandise goes up and down from there—if you order enough you might get *two* diamond tie tacks. I suppose they strike a few gullible individuals, else they would not send the sheet. It's a rather sad commentary.—Northwest Medicine.

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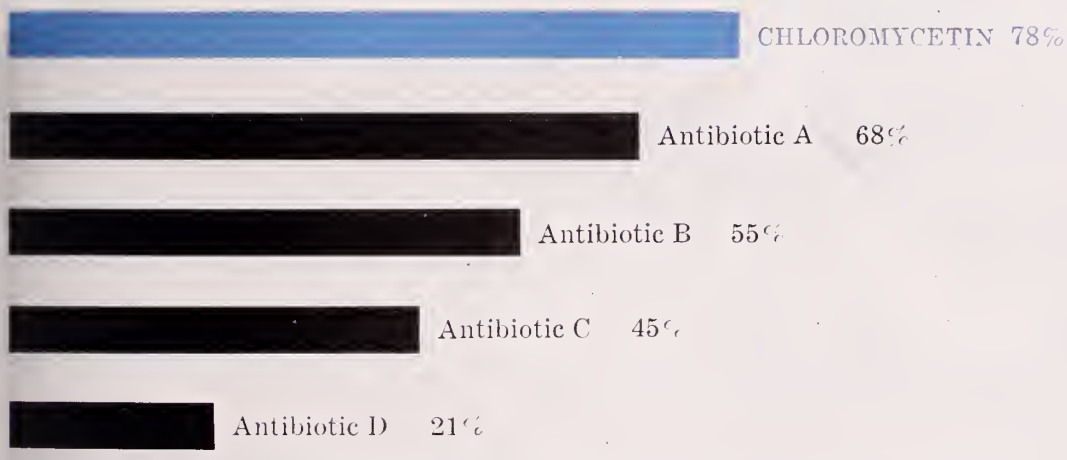

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*Adapted from Bauer, Perry, & Kirby

References: (1) Bauer, A. W.; Perry, D. M., & Kirby, W. M. M.: *J.A.M.A.* 173:475, 1960. (2) Fisher, M. W.: *Arch. Int. Med.* 105:413, 1960. (3) Cohen, S.: *Circulation* 20:96, 1959. (4) Edwards, T. S.: *Am. J. Ophth.* 48, Part II:19, 1959. (5) Smith, I. M.: Staphylococcal Infections, Chicago, The Year Book Publishers, Inc., 1958, p. 148. (6) Petersdorf, R. G.; Rose, M. C.; Minchew, H. B.; Keene, W. R., & Bennett, I. L., Jr.: *Arch. Int. Med.* 105:398, 1960. (7) Editorial: *J.A.M.A.* 173:544, 1960. (8) Finland, M.; Jones, W. F., Jr., & Bennett, I. L., Jr.: *Arch. Int. Med.* 104:365, 1959.

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—News—

• Compiled from material furnished by Cletis Pride, Public Information Officer, West Virginia University Medical Center, Morgantown, W. Va.

DR. Harold G. Young of Morgantown has accepted appointment as Clinical Associate Professor of Surgery at the West Virginia University School of Medicine. The appointment was announced late in May by Acting President Clyde L. Colson.

Doctor Young, who is a native of Moundsville, served for 31 years with the Medical Corps of the United States Navy before retiring in 1958 with the rank of Rear Admiral.

He was graduated from West Virginia University and received his M. D. degree from the Northwestern University School of Medicine. During his Naval service, he organized and administered the residency training program at the U. S. Naval Hospital at Oakland, California, and later was chief of surgical services there.

During World War II, Doctor Young was awarded the Bronze Star Medal for duty at Iwo Jima and a Unit Citation for his outstanding work at a hospital he commanded on that Pacific island.

He is certified by the American Board of Surgery and is a Fellow of the American College of Surgeons. He is a member of the Monongalia County Medical Society, the West Virginia State Medical Association and the American Medical Association.

Residency Program in Anesthesiology

University officials have announced that the residency training program in anesthesiology at the Medical Center has been approved by the American Medical Association's Committee on Accreditation of Internships and Residencies.

Applications for this two-year program leading to board certification in anesthesiology are being accepted by Dr. Richard E. Jones, Professor and Chairman of the Department of Anesthesiology.

59 Students in First-Year Class

Dean Clark K. Sleeth has announced that 59 students, the largest number in University history, have been accepted for entry this fall by the West Virginia University School of Medicine. He said the first-year class is expected to number 60 when the academic year begins in September.

Successful applicants come from every part of West Virginia, as well as from five other states They are as follows:

Billie M. Atkinson, Reedy; Charles R. Baisden, Stollings (Logan County); Howard K. Blankenship, Moundsville; Raymond L. Brown and W. Richard Clark, Welch; Erskine M. Caperton, Mt. Hope; Larry D. Curnutte, Kenova; Robert L. Ferrell, James R. Dollison, Trevelyn F. Hall, Philip C. Hopewell, Clarence M. Neptune and Robert E. Petres, Fairmont.

Eugene R. Dorsey, William R. Fields and Ivan R. Harwood, Huntington; Clare D. Edman, Buckhannon; Donald E. Farmer, Athens; James B. Hammond, Rivesville; Eldon L. Hawbaker, Martinsburg; David R. Hess, Bridgeport; Robert K. Hobbs and Albert J. Turbessi, Chester; Nancy M. Hockensmith, Shenandoah Junction.

John E. Holman and Thomas L. Ritz, Wheeling; Sandra L. Kovach, Alex J. Sabo and Hubert A. Shafer, Morgantown; Richard D. Landes, Riverton; Linda D. Lewis, Beech Bottom; Robert L. Likens, Coalwood; Anne M. Lorenzo, Charles Town; Joseph F. Maiocco and Samuel S. Selario, Clarksburg; Thomas J. Mearns, Summersville.

John E. Osborne, St. Albans; Sanford N. Plevin, Weirton; Dianna Rechtine, Kingwood; Joe W. Rhudy, Lewisburg; John A. Rizzo, Farmington; Robert E. Sams and Clara Jane Toothman, Parkersburg; Jerry D. Shamblin, South Charleston; Sally L. Taylor, Alloy; Edward H. Thompson, Williamson.

Robert J. Watson, Gary; Thomas E. Weier, Bluefield; Sharon R. Woods, Mullens; Merrill F. Wymer, Jane Lew; Frank J. Zsoldos, Pineville; Warner Beck, Philadelphia, Pa.; Saul R. Berg and Joseph S. Gregori, Pittsburgh, Pa.; Don L. Conaway, Uniontown, Pa.; Dennis R. Milliter, Litchfield, Ill.; Robert M. Carroll, Westport, Conn.; Harvey D. Reisenweber, Baltimore, Md.; and Norman P. Silvers, Flushing, N. Y.

Research Grant

Acting University President Clyde L. Colson announced recently receipt of a $8,682 grant to continue University research into certain aspects of shock.

The grant, sponsored by the National Institutes of Health, Department of Health, Education and Welfare, will be used by Dr. Daniel T. Watts, professor and chairman of the Department of Pharmacology, to support a study of "The Role of Sympathomimetic Amines in Hemorrhagic Shock."

The research is directed at finding the amount of vasal constrictive material in the blood vessels during shock and how this material affects vital organs.

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Outstandingly Safe and Effective

for the tense and nervous patient

1 simple dosage schedule relieves anxiety dependably — without the unknown dangers of "new and different" drugs

2 does not produce ataxia, stimulate the appetite or alter sexual function

3 no cumulative effects in long-term therapy

4 does not produce depression, Parkinson-like symptoms, jaundice or agranulocytosis

5 does not muddle the mind or affect normal behavior

Usual dosage: One or two 400 mg. tablets t.i.d.
Supplied: 400 mg. scored tablets, 200 mg. sugar-coated tablets; bottles of 50. Also as MEPROTABS*—400 mg. *unmarked*, coated tablets; and in *sustained-release* capsules as MEPROSPAN®-400 and MEPROSPAN®-200 (containing respectively 400 mg. and 200 mg. meprobamate).
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The Month in Washington

• **From the Washington Office of the American Medical Association.**

THE American Medical Association supported the Kennedy Administration's proposal to provide $750 million in matching funds for construction of medical, dental, public health and osteopathic schools. In a letter to Sen. Lister Hill (D., Ala.), Chairman of the Senate Labor and Public Welfare Committee, Dr. F. J. L. Blasingame, Executive Vice President of the AMA, said:

"As an Association of 179,000 practicing physicians, we are vitally interested in maintaining the high quality of medical education in the United States because of its direct relationship to medical care. For over a century, the American Medical Association has been actively and effectively engaged in the improvement of medical education in the United States. It can now be said, with assurance, that medical education in this country is superior to that found anywhere else in the world. It is not a coincidence that the improved standards of medical care in the last half century saw the elimination of sub-standard medical schools and diploma mills which had been turning out graduates in large numbers. This improvement in medical education is the result of the vigorous efforts of this Association and other interested organizations.

"We strongly believe that increased attention must be given to the adequacy of physical facilities, the availability of qualified instructors and the availability of teaching material and patients for the clinical phases of medical education if high standards of medical education are to be maintained. Any attempt to increase the number of medical students without regard to these conditions will result in a lowering of the standard of medical education. We are of the firm conviction that increase in the physical facilities available for medical education should be given priority at this time over any other federal legislation in the field of medical education.

"We believe that there is need for assistance in the expansion, construction and remodeling of the physical facilities of medical schools and, therefore, a one-time expenditure of federal funds on a matching basis, where maximum freedom of the school from federal control is assured, is justified."

The AMA opposed a provision that might encourage medical schools to expand too rapidly. Doctor Blasingame said: "It is quite possible that a forced increase in freshman enrollment would be detrimental to the quality of medical education."

The Association didn't take a position on the provision of the Administration legislation that would provide federal scholarships to medical students. However, Doctor Blasingame described to the Senate committee the AMA's new medical scholarship and student loan programs.

Medicare Program

The General Accounting Office found the Defense Department's Medicare program being conducted generally "in a satisfactory manner," but recommended some changes designed to correct what it considered "important deficiencies."

The Army, which administers the program of medical care for dependents of members of the armed services, took steps to put into effect most of the recommendations of the GAO, which audits federal spending for Congress. However, Medicare officials rejected a GAO proposal for a change in physician fees.

"Our review disclosed that physicians' claims for medical care are, in general, significantly higher in states where maximum fees are made known to physicians than in those states where maximum fees are not made known," the GAO reported. "We estimate that there is an additional cost of as much as $3 million to $4 million annually as a result of maximum fees, rather than normal fees, being charged in the states where fee schedules are distributed to the physicians."

The GAO recommended that lower fixed fee schedules be negotiated for states where a high percentage of physicians claims are for maximum allowable fees, "subject to being raised only on the basis of clearly supported evidence of higher normal fees."

If lower fees cannot be negotiated, the GAO said, efforts should be made "to have the state medical society or other appropriate parties accept the responsibility of determining that physician claims are generally not in excess of their normal charges."

The GAO further recommended that "physicians be required to certify on each claim that the amount billed does not exceed the physician's normal fee for the medical care furnished."

The Army disagreed, saying that it believed "the present contracting concept is the most suitable to meet the requirements and is in the best interests of the government."

The AMA noted that it had held from the outset that "fixed fee schedules would result in a more expensive program than if physicians were permitted to charge their normal fees."

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Annual Audit, 1960

The annual audit of receipts and disbursements of the West Virginia State Medical Association for the calendar year 1960 has been completed by the firm of Fitzhugh, Erwin, McKee and Hickman, Certified Public Accountants of Charleston. The complete audit, with letter of transmittal, follows:

FITZHUGH, ERWIN, McKEE & HICKMAN
Certified Public Accountants
Kanawha Banking & Trust Building
Charleston 1, W. Va.

West Virginia State Medical Association
Charleston, West Virginia

We have examined the receipts and disbursements of your Association for the year ended December 31, 1960. Summary statements of the various funds which were prepared from your records and a schedule of bonds owned at the year end are presented herewith.

Cash in bank amounting to $40,742.19 at December 31, 1960, was reconciled with the balance confirmed by the depository bank and bonds owned by your Association at that date were verified by inspection at the safe deposit box on June 5, 1961.

On August 1, 1960 the Association purchased U. S. Treasury bonds at a cost of $5,326.23 which includes accrued interest. The bonds were purchased for the Medical Scholarship Fund and have a maturity value of $6,000.00 bearing interest at 2½ per cent.

In our opinion, all receipts of record of West Virginia State Medical Association for the year ended December 31, 1960, have been properly accounted for and the balance of cash in bank and bonds owned at December 31, 1960, are correctly stated herein.

FITZHUGH, ERWIN, McKEE & HICKMAN

Charleston, W. Va.
June 6, 1961

COMBINED STATEMENT OF RECEIPTS AND DISBURSEMENTS FOR THE YEAR 1960

CASH IN BANK—JANUARY 1, 1960		$ 38,142.26
RECEIPTS		
Dues	$ 47,159.50	
Interest on U. S. Bonds	725.00	
Collection Commission on A.M.A. Dues	326.49	
Advertising	45,106.90	
Emblems sold	68.25	
Subscriptions	245.00	
Extra cuts in journal	12.15	
Exhibit space sold	7,030.00	
Dues collected for A. M. A.	36,237.50	
Medical Scholarship Fund Assessment	4,423.50	
Contribution to Medical Scholarship Fund	500.00	
Refunds	295.00	
Total Receipts		142,129.29
		180,271.55
DISBURSEMENTS		
General Fund	41,879.27	
Medical Journal Fund	43,045.33	
Convention Fund	9,955.70	
Dues forwarded to A. M. A.	36,237.50	
Medical Scholarship Fund	7,826.23	
Public Service Fund	585.33	
Total Disbursements		139,529.36
CASH IN BANK—DECEMBER 31, 1960		$ 40,742.19

GENERAL FUND
Statement of Receipts and Disbursements for the Year 1960

BALANCE—JANUARY 1, 1960		$ 10,182.01
RECEIPTS		
Dues (allocated to General Fund)	$ 47,159.50	
Interest on U. S. Bonds	650.00	
Collection Commission on A.M.A. Dues	326.49	
Refunds—Travel expense	50.00	
Medical Directory	45.00	
A. M. A. Dues	25.00	
Transferred from Medical Journal Fund	5,000.00	
Total Receipts		53,255.99
		63,438.00

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GRACE M. COLLET, PH. D.
VERNON W. SHAFER, PH. D.
Clinical Psychologists

MARY JANE McCONAUGHEY, M. S. W.
Psychiatric Social Worker

PAULINE L. TOOILL, R. R. L.
Medical Record Librarian

JAMES L. HAGLE, M. B. A.
Administrator

ESTHER L. SIMPSON, R. N.
Director of Nurses

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DISBURSEMENTS		
Salaries (less payroll taxes):		
Executive secretary	6,941.00	
Office	9,445.07	
Office supplies and expense	3,921.23	
Office rent	3,162.67	
Library expense	118.22	
Telephone and telegraph	1,346.44	
Postage	1,355.07	
Travel	5,387.64	
Payroll taxes	5,383.61	
Unemployment tax	403.55	
Mimeographing	1,100.04	
Expense of Council and Committee meetings	1,351.77	
Refund—A. M. A. dues	25.00	
Miscellaneous expense	1,937.96	
Total Disbursements		41,879.27
BALANCE—DECEMBER 31, 1960		$ 21,558.73

MEDICAL JOURNAL FUND

Statement of Receipts and Disbursements for the Year 1960

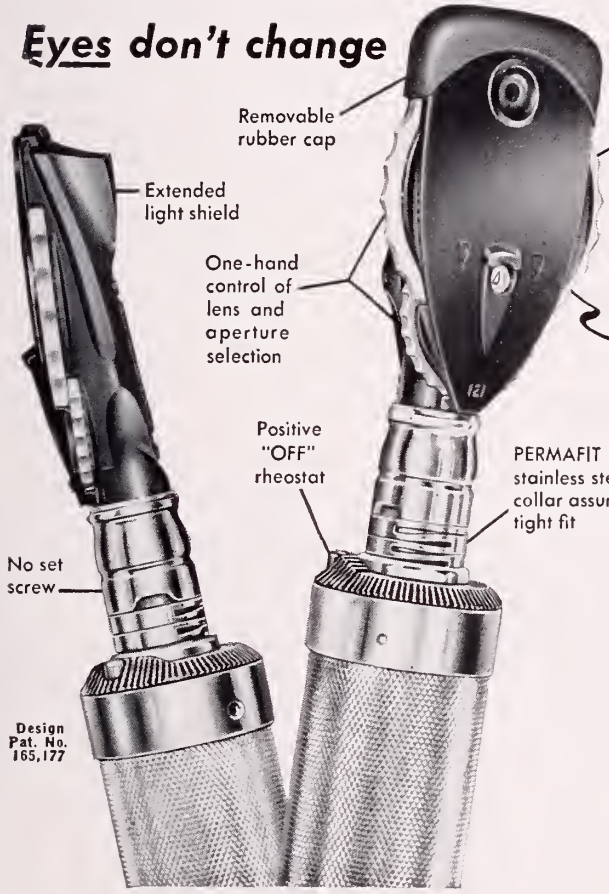
BALANCE—JANUARY 1, 1960		$ 10,153.47
RECEIPTS		
Advertising	$ 45,106.90	
Emblems sold	68.25	
Subscriptions sold	245.00	
Extra cuts in article	12.15	
Total Receipts		45,432.30
		55,585.77
DISBURSEMENTS		
Printing	31,960.18	
Engraving	701.08	
Postage	854.00	
Salaries and editing	7,529.04	
Travel	541.98	
Dues	4.00	
Clippings and prints	593.54	
Telephone	384.00	
Postage and mailing	78.30	
Miscellaneous	399.21	
Transferred to General Fund	5,000.00	
Total Disbursements		48,045.33
BALANCE—DECEMBER 31, 1960		$ 7,540.44

CONVENTION FUND

Statement of Receipts and Disbursements for the Year 1960

BALANCE—JANUARY 1, 1960		$ 8,590.28
RECEIPTS		
Exhibit space sold	$ 7,030.00	
Refund—Convention Golf tournament	175.00	
Total Receipts		7,205.00
		15,795.28
DISBURSEMENTS		
Supplies and labor	6,213.48	
Travel	729.23	
Entertainment	1,834.81	
Reporting	241.50	
Telephone	267.50	
Postage	20.00	
Advance— Convention Golf Tournament	200.00	
Auxiliary Convention expenses	250.00	
Miscellaneous	195.00	
Refund	4.18	
Total Disbursements		9,955.70
BALANCE—DECEMBER 31, 1960		$ 5,839.58

Eyes don't change ... but instruments do



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AMERICAN MEDICAL ASSOCIATION DUES

Statement of Receipts and Disbursements for the Year 1960

BALANCE DUE A. M. A.—JANUARY 1, 1960		None
RECEIPTS		
Dues collected for A. M. A.		$ 36,237.50
		36,237.50
DISBURSEMENTS		
Dues forwarded to A. M. A.		36,237.50
BALANCE DUE A. M. A.—DECEMBER 31, 1960		$ None

PUBLIC SERVICE FUND

Statement of Receipts and Disbursements for the Year 1960

BALANCE STATE ASSESSMENTS—JANUARY 1, 1960		$ 2,552.00
RECEIPTS		None
		2,552.00
DISBURSEMENTS		
Conference and general expense		585.33
BALANCE STATE ASSESSMENTS—DECEMBER 31, 1960		$ 1,966.67

MEDICAL SCHOLARSHIP FUND

Statement of Receipts and Disbursements for the Year 1960

BALANCE—JANUARY 1, 1960		$ 6,664.50
RECEIPTS		
Assessments	$ 4,423.50	
Contributions	500.00	
Interest on U. S. Treasury Bonds	75.00	
Total Receipts		4,998.50
		11,663.00
DISBURSEMENTS		
Scholarship Installments	2,500.00	
Purchase of U. S. Treasury Bonds and accrued interest	5,326.23	
Total Disbursements		7,826.23
BALANCE—DECEMBER 31, 1960		$ 3,836.77

SCHEDULE OF BONDS OWNED AS OF DECEMBER 31, 1960

Bond	*Serial*	*Due Date*	*Maturity Value*
U. S. Treasury 2½%	27070L	12-15-67/72	$10,000.00
U. S. Treasury 2½%	27846F	12-15-67/72	10,000.00
U. S. Treasury 2½%	70011A	12-15-67/72	1,000.00
U. S. Treasury 2½%	70012B	12-15-67/72	1,000.00
U. S. Treasury 2½% (Sp. Fund)	72361A	12-15-67/72	1,000.00
U. S. Treasury 2½%	19[illegible]34D	12-15-67/72	500.00
U. S Treasury 2½%	20707H	12-15-67/72	500.00
U. S. Treasury 2½%	20935E	12-15-67/72	500.00
U. S. Treasury 2½%	21421A	12-15-67/72	500.00
U. S. Treasury 2½%	21914D	12-15-67/72	500.00
U. S. Treasury 2½%	22646F	12-15-67/72	500.00
U. S. Treasury 2½% (Medical Scholarship Fund)	6873C	9-15-67/72	5,000.00
U. S. Treasury 2½% (Medical Scholarship Fund)	18933K	9-15-67/72	1,000.00
Series "J"	Q22297J	1-1-1968	25.00
Series "J"	Q22298J	1-1-1968	25.00
Total			$32,050.00

COMPARATIVE SCHEDULE OF CASH AND BONDS AS OF DECEMBER 31, 1959 and 1960

CASH	12-31-59	12-31-60	Increase (Decrease)
General Fund	$10,182.01	$21,558.73	$11,376.72
Medical Journal Fund	10,153.47	7,540.44	(2,613.03)
Convention Fund	8,590.28	5,839.58	(2,750.70)
A. M. A. Dues			
Public Service Fund	2,552.00	1,966.67	(585.33)
Medical Scholarship Fund	6,664.50	3,836.77	(2,827.73)
Total Cash	38,142.26	40,742.19	2,599.93
U. S. BONDS (at cost)	25,818.68	31,144.91	5,326.23
TOTAL CASH AND BONDS	$63,960.94	$71,887.10	$ 7,926.16

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Obituaries

ROBERT LEE HUNTER, M. D.

Dr. Robert Lee Hunter, 80, of Whitesville, died on June 1 at a hospital in Huntington following an illness of several months.

Doctor Hunter was a native of Raleigh County and he received his M. D. degree from the University of Louisville School of Medicine in 1907. He had practiced in Raleigh and Boone Counties for more than 50 years.

He served in the Medical Corps of the United States Army during World War I, being released with the rank of Lieutenant. He served a term as a member of the West Virginia House of Delegates, 1923-24.

Doctor Hunter was an honorary life member of the Boone County Medical Society, the West Virginia State Medical Association and the American Medical Association. He served for several years as secretary of his local society.

Besides his widow, he is survived by a daughter, Mrs. Joseph Soto of Charleston; two sisters, Mrs. Minnie Wright of Miami, Florida, and Miss Ida M. Hunter of Beckley; two brothers, Dr. Hubert R. Hunter of Whitesville and Dr. W. Byrd Hunter of Coral Gables, Florida; and two grandchildren.

SOLOMON GRANVILLE MOORE, M. D.

Dr. Solomon Granville Moore, 83, of Stephens City, Virginia, died on April 29 at his home in that city following a long illness.

Doctor Moore practiced medicine in Elkins for many years prior to his retirement in 1948, at which time he moved to Stephens City.

He was born at Belington, Barbour County, on December 1, 1877, son of the late Alpheus and Lucinda Yoak Moore. He was graduated from West Virginia University and received his M. D. degree from the College of Physicians and Surgeons in Baltimore in 1906.

He took postgraduate training at Harvard Medical School and Columbia University College of Physicians and Surgeons. He was licensed to practice medicine in West Virginia in 1906 and was located at Coalton, 1906-10, prior to moving to Elkins where he practiced continuously until his retirement in 1948.

He was an honorary life member of the Barbour-Randolph-Tucker Medical Society, the West Virginia State Medical Association and the American Medical Association. He served for many years as physician to the West Virginia Odd Fellows Home and the West Virginia Childrens Home.

Besides his wife, he is survived by two daughters, Mrs. Robert Musgrove of Houston, Texas, and Miss Elizabeth Moore, a teacher at Elkins High School; two brothers, Winfield S. Moore of Belington and J. B. Moore of Elkins; and two grandchildren.

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Orthopedic Hospital for the treatment of all types of crippling conditions.

Facilities for Physical Therapy, Occupational Therapy, X-Ray, Laboratory and Surgery.

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Each fluidounce contains:

Paregoric (equivalent)	60 mins.
Kaolin Colloidal	90 grs.
Pectin	3 grs.

A suspension possessing highly absorbent, demulcent and astringent properties for use in the control of diarrhea.

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A CREAMY STABLE SUSPENSION

READY TO DISPENSE – NO MIXING

Supplied in Pints and Gallons

Dosage: Adults, 2 or more tablespoonfuls after each bowel movement, or as indicated.

Children, 1 or more teaspoonfuls according to age.

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HUNTINGTON, WEST VIRGINIA

ROBERT WRISTON, M. D.

Dr. Robert Wriston, 81, of Beckley, died on May 20, 1961, at a hospital in that city following a long illness.

Doctor Wriston was born at Kincaid, Fayette County, son of the late Isaac and Alice (Stanley) Wriston, in August 1879. He was graduated from Concord State College and taught in the public schools of Fayette County for several years.

He received his M. D. degree from the College of Physicians and Surgeons (now University of Maryland School of Medicine), in 1905, and served an internship and residency at City Hospital in Baltimore prior to entering general practice in Beckley.

In 1913, Doctor Wriston and the late Dr. J. E. Coleman founded Beckley Hospital. They operated the hospital until 1922 when it was sold to Dr. A. U. Tieche and the late Dr. J. H. McCulloch.

Doctor Wriston, who served two terms as mayor of Beckley, was an honorary member of the Raleigh County Medical Society, the West Virginia State Medical Association, the American Medical Association, and the Southern Medical Association.

In October, 1955, he was presented a 50-year plaque by the Raleigh County Medical Society.

Besides his widow, he is survived by four daughters, Mrs. James G. Rizos and Miss June Wriston, both of Fairborn, Ohio, Mrs. W. H. File, Jr., and Miss Martha Wriston, both of Beckley; a sister, Mrs. Maud Stover of Beckley; and a brother, Wilbur of Maple Fork; and six grandchildren.

Physician's Image

Many physicians still feel that the medical profession can do and say what it pleases and somehow public relations can make it acceptable. Nothing could be farther from the truth. Public relations is common sense. Good deeds and their proper interpretation are the fundamental precepts of effective public relations.

It is not enough for the individual physician to give tacit support to the efforts of his local and state societies, or to those of the American Medical Association. He must be more than a dues-payer if he wishes to preserve medicine's freedom to practice in its traditional way.

He must be the articulate voice of his profession, wherever he is. He must be dedicated to the well-being of his community. In matters of health, he must be willing to assume responsibility and discharge it like the expert he is. He must be citizen as well as doctor, plaintiff's attorney for his patients, missionary for the individual and for the individual's rights.

The image of medicine is simply an extended likeness of the physician and his colleagues, reflected in the mirror of public opinion. It can be warm and sympathetic or cold and impersonal.

Actions speak louder than words, and words are without value unless they are backed up by deeds. The image of our profession is the reflection of our substance and not our shadow.—Joseph P. Cain, Jr., M. D., in The Journal of the South Carolina Medical Association.

County Societies

CABELL

Dr. Edmund B. Flink of Morgantown was the guest speaker at the regular monthly meeting of the Cabell County Medical Society which was held at the Hotel Frederick in Huntington on May 11.

Doctor Flink, who is Professor and Chairman of the Department of Medicine at the West Virginia University School of Medicine, presented an interesting paper on "Potassium and Magnesium Deficiencies."

Dr. James S. Klumpp, who is chairman of the Medical Economics Committee of the State Medical Association, presented a report on the MAA program and discussed several changes which have been made in the fee schedule. He also presented a report on the work of the local public relations committee.

The Society went on record as commending Drs. Klumpp and Walter R. Wilkinson for their splendid performances in a recent series of television debates on medical care for the aged.

Dr. Clarence H. Boso, the treasurer, reported that 124 of the 146 active members in the Society had contributed to the AMEF through the voluntary assessment.

Dr. C. Stafford Clay, the president, presided at the meeting and he announced that the annual Pfizer party would be held at the Holiday Inn on June 8. —W. L. Neal, M. D., Secretary.

* * * *

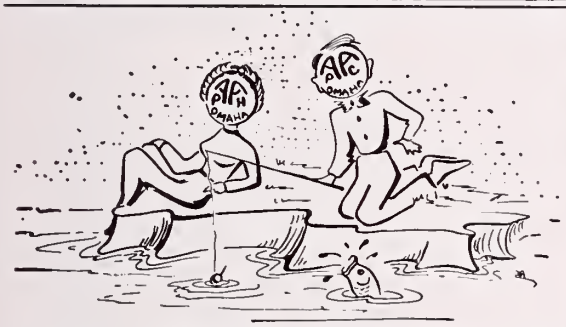
HANCOCK

The annual dinner meeting of the Hancock County Medical Society was held at the William's Country Club in Weirton on May 25.

Honor guests were Dr. D. E. Greeneltch of Wheeling, president elect of the West Virginia State Medical Association; Dr. and Mrs. Clark K. Sleeth of Morgantown; and members of the Woman's Auxiliary. Doctor Sleeth is Dean of the WVU School of Medicine and his wife is President of the Woman's Auxiliary to the State Medical Association.

Doctor Sleeth presented an interesting talk on the progress achieved during the past few years at the new WVU Medical Center, and Doctor Greeneltch discussed the Medical Assistance for the Aged Program in West Virginia.

Dr. E. M. Clubb, Jr., the president, presided at the meeting and he introduced Dr. Myer Bogarad, a past president of the West Virginia Chapter, AAGP, who was nominated by the Hancock Society as its candidate for the state's "General Practitioner of the Year" award.



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THE MYERS CLINIC
Philippi, West Virginia

Drs. Leon M. Osachuk, Ray S. Greco and David S. Pugh were in charge of arrangements for the dinner.—Edward A. Gretchen, M. D., Secretary.

* * * *

McDOWELL

Dr. Albert D. Kistin of Beckley was the guest speaker at the regular monthly meeting of the McDowell County Medical Society which was held at the Grace Hospital in Welch on May 10.

Doctor Kistin, who is a member of the staff at Beckley Memorial Hospital, presented an interesting paper on "Diet and Coronary Artery Disease." The speaker was introduced by Dr. Ray E. Burger and there was a question and answer period following the presentation of his paper.

Dr. Louis A. Vega announced that members of the Society had been invited to a medicolegal meeting in Welch on May 27. He said that Albert Allenback and several other noted trial lawyers had accepted invitations to appear as guest speakers at the one-day seminar.

The Society also voted to table a resolution concerning the compulsory inclusion of physicians under Social Security.—George L. Fischer, M. D., Secretary.

* * * *

MERCER

A joint meeting of the Mercer County Bar Association and County Medical Society was held at the West Virginian Hotel in Bluefield on May 15. The dinner meeting was preceded by a social hour.

Robert Richardson, president of the Bar Association, presided at the meeting and the guest speaker was the Reverend Frank Rowley, who presented an interesting talk on "Hilarious Happenstances in Ecclesiastical and Sacredotal Surroundings."

Dr. Henry F. Warden, president of the Medical Society, announced that the Society had voted to contribute $50 to the West Virginia Diabetes Association.—John J. Mahood, M. D., Secretary.

A small boy attending dancing school was instructed by his mother to say something nice to each young lady as he escorted her back to her seat. He danced with a young girl and took her back to her seat without saying anything to her. Remembering the oversight he went back to her and said:

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to the

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AUXILIARY SCHOLARSHIPS

Mrs. A. J. Villani of Welch, Chairman of the Committee on Health Careers of the Woman's Auxiliary to the West Virginia State Medical Association, announced recently that scholarships have been awarded for the coming year to three students enrolled in schools of nursing and medical technology.

Miss Barbara Jean Miller of Monongalia County was selected as the recipient of the first place award of $250. She will enroll this fall as a medical technology student at West Virginia University.

The second place scholarship worth $100 was awarded to Miss Sandra Farris of McDowell County, who will enter the Roanoke Memorial Hospital School of Nursing in Roanoke, Virginia; and the third place award, also worth $100, went to Miss Hilda Smoot of Boone County, who will enroll at St. Mary's Hospital School of Nursing in Huntington.

OHIO

Mrs. Clark K. Sleeth and Mrs. Edward J. Van Liere, both of Morgantown, were honor guests at the regular monthly meeting of the Woman's Auxiliary to the Ohio County Medical Society which was held at the Wheeling Country Club on May 16.

Mrs. Sleeth, who is president of the State Auxiliary, presented an interesting talk and also installed the following officers for the coming year: Mrs. George M. Kellas, president; Mrs. Harry S. Weeks, Jr., president elect; Mrs. Thomas L. Thomas, vice president; Mrs. Ross O. Bell, Jr., recording secretary; Mrs. Daniel Gordon, corresponding secretary; and Mrs. Herbert G. Dickie, Jr., treasurer.

Mrs. Van Liere, wife of the former dean of the WVU School of Medicine, reported on the activities of the newly formed Auxiliary to the University Hospital at the Medical Center. She is president of the organization.

Mrs. Howard G. Weiler was in charge of arrangements for the meeting and she was assisted by Mesdames James E. Spargo, John G. Thoner, Charles D. Hershey, William K. Kalbfleisch, Daniel W. Dickinson and Don S. Benson.—Mrs. Andrew J. Barger, Publicity Chairman.

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E. Lloyd Jones, M. D.

Ophthalmology:
T. J. Pavlick, M. D.

Orthopedic Surgery:
C. B. Buffington, M. D.

Thoracic Surgery:
Daniel W. Dickinson, M. D.

Obstetrics and Gynecology:
Robert W. Leibold, M. D.
Robert T. Brandfass, M. D.

Urology:
Richard D. Gill, M. D.

Neurological Surgery:
James S. Rogers, M. D.
Frank M. Hudson, M. D.

Internal Medicine:
William M. Sheppe, M. D.
Charles H. Hiles, M. D.
Albert M. Valentine, M. D.
James A. Jacob, Jr., M. D.

Neurology and Psychiatry:
Albert L. Wonner, M. D.

Roentgenology:
William K. Kalbfleisch, M. D.

Clinical Laboratories:
Barbara Karrer, M. T.

Technologists:
Electrocardiography:
Joan Carrigan, R. N.
Electroencephalography:
JoAnn Hastings
Roentgenology:
Evelyn Forester, R. T.

Business Administration:
John H. Clark, Manager
Lester L. Cline, Ass't. Bus. Mgr.

Book Reviews

THE GOLDEN AGE COOKBOOK—By Phyllis MacDonald. Pp. 192. Doubleday & Company, Inc., 575 Madison Avenue, New York 22, New York. 1961. Price $2.95.

I believe there was premeditated action by the editor in sending this title to a jaded old man with pernickety food tastes for review. The fact that one is well into the golden years does not lessen his taste for veal escallipini, shish-kabob, cherry jubilee and other favorites, as opposed to oatmeal, braised squash, poached salmon, and other dietary iniquities inflicted upon the elderly citizen.

To be factual, this volume is a well-arranged compendium of good preparations, adapted and suited to older persons. Its 150 recipes are based upon seasonal variety, ease of preparation, nutritional value and food costs. There is a suggested menu for each day in the week, well-balanced as to food content and appearance, vitamin and caloric requirement, and digestibility. Might I suggest that our younger generation take heed of these dietary suggestions and thus ensure greater longevity.

Closing note: I still prefer steak to oyster milk toast. —James S. Klumpp, M. D.

* * * *

CARDIAC EMERGENCIES.—By Harold D. Levine, M. D., Senior Associate in Medicine, Peter Bent Brigham Hospital, Boston, and Assistant Clinical Professor of Medicine, Harvard Medical School. Pp. 381, with numerous illustrations. Landsberger Medical Books, Inc., 51 East 42nd Street, New York City. 1960. Price $12.00.

Cardiac Emergencies is a small book of 350 pages. This monograph is the outgrowth of a series of seminars presented during the last 15 years to fourth year students of the Harvard Medical School during their affiliation in the medical service of the Peter Bent Brigham Hospital.

It is so presented to be of interest to students, general practitioners, internists and cardiologists.

The book is composed of 17 chapters dealing with various aspects of cardiac therapy; especially those conditions in which treatment must be prompt and effective if the patient may survive.

In each chapter are paragraphs on diagnosis and detailed statements concerning immediate remedial measures. Each chapter is followed by a substantial listing of references.

Readers may be critical of some statements such as the author's reference to the use of oxygen in infarction, or the treatment of all infarction patients with anticoagulants, but all will find a thorough resume of the treatment of all cardiac emergencies in a small book, which can be available in the car bag or hospital and eliminates time consuming reference to the larger texts.

BLOOD DISEASES OF INFANCY AND CHILDHOOD.—By Carl H. Smith, M.A., M. D., Professor of Clinical Pediatrics, Cornell University Medical College, New York City. Pp. 572, with numerous illustrations. The C. V. Mosby Company, St. Louis, Missouri. 1960. Price $17.00.

This is a valuable book with much recent data about the newer problems of hematology. Perplexing subjects, such as coagulation disorders and abnormal hemoglobin dyscrasias, as well as the more common blood disorders encountered in pediatrics are discussed.

The material and literature are extensively surveyed and it contains a large bibliography so that there is little material published previous to this writing which is not reviewed for this book. Some of the parts are difficult reading; this can be attributed to the nature of the subject rather than to the style of the author.

One improvement which might be suggested is the addition of colored pictures which are so valuable when evaluating blood morphology. All in all, this is a book which is valuable and which would be used sufficiently by those interested in blood diseases to merit its being purchased.—Donald M. Burke, M. D.

* * * *

CARDIOVASCULAR DYNAMICS—Robert F. Rushmer, M. D., Professor of Physiology and Biophysics, University of Washington Medical School. Pp. 503, with numerous illustrations. Philadelphia and London: W. B. Saunders & Co. Second Edition. 1961. Price $12.50.

Cardiovascular Dynamics is a second edition. The first edition was published under the title, "Cardiac Diagnosis." This book is extensively revised, enlarged and reorganized. It is intended as a supplemental text in teaching for courses in Physiology, Physical Diagnosis and Clinical Cardiology. It is designed for cardiovascular student from first year medical students to experienced cardiologists.

The book comprises 16 chapters and 480 pages. The latter one-half is of more interest to the clinician, but the first eight chapters offer the best background for the basic science of cardiology. It will be interesting to those physicians who wish to explore beyond the apparent clinical finding. The chapter on electrical activity is worth reading by all physicians who desire a better understanding of electrocardiography.

The book can be recommended to all students of medicine, especially those with an academic interest in cardiology.

* * * *

HANDBOOK OF SURGERY—Edited by John L. Wilson, M. D., Chief of Surgery, VA Hospital, San Francisco, and Associate Clinical Professor of Surgery, University of California School of Medicine, San Francisco; and Joseph J. McDonald, M. D., Dean of the Faculty of Medical Sciences, American University of Beirut, Beirut, Lebanon. Pp. 644. Lange Medical Publications, P. O. Box 1215, Los Altos, California. 1960. Price $4.00.

As the name implies this is a small book on surgery, bound with a flexible cover to be carried in the physician's pocket or in his bag. While the subject matter is presented in outline form it nevertheless covers the various topics in a manner which is thorough enough to give the physician the essential

information to make a surgical diagnosis and initiate treatment.

It covers first-aid, preoperative and postoperative care, anesthesia, nutrition, fluid and electrolyte therapy, surgical infections, pediatric surgery, neurologic surgery, thoracic surgery and urologic surgery, as well as the problems involved in the diagnosis and management of the numerous disorders ordinarily considered as being in the province of the general surgeon.

Illustrations, charts and tables are used where they are necessary to explain techniques or to make information quickly available.

The paper used in the book is a type of bond which will withstand heavy usage.

This book is recommended for interns and residents. It will also be found useful to the physician whose primary interest is internal medicine or pediatrics but, who must cope with surgical emergencies nevertheless in the routine of his practice.—Hu C. Myers, M. D.

Books Received

CARDIOVASCULAR DYNAMICS — Robert F. Rushmer, M. D., Professor of Physiology and Biophysics, University of Washington Medical School. Pp. 503, with numerous illustrations. Philadelphia and London: W. B. Saunders & Co. Second Edition. 1961. Price $12.50.

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PROCEEDINGS OF THE PNEUMOCONIOSIS CONFERENCE IN JOHANNESBURG, FEBRUARY 24, 1959.—Edited by A. J. Orenstein, M. D., Director, Pneumoconiosis Research Unit. Pp. 632, with illustrations. Little, Brown and Company, Boston 6, Massachusetts. 1961. Price, $22.50.

* * * *

THE HAND—Manual and Atlas for the General Surgeon—By Henry C. Marble, M. D., Consulting Surgeon to the Massachusetts General Hospital. Boston. Pp. 207, with numerous drawings. Philadelphia & London: W. B. Saunders & Co. 1960. Price $7.00.

* * * *

TEXTBOOK OF MEDICINE—By Various Authors and edited by Sir John Conybeare, K. B. E., M. C., D. M. (Oxon.), F. R. C. P., Consulting Physician to Guy's Hospital, London; and W. N. Mann, M. D. (Lond.), F. R. C. P., Physician to Her Majesty's Household and Physician to Guy's Hospital, London. Pp. 989, with numerous illustrations. The Williams & Wilkins Company, Baltimore 2, Maryland. 1961. Thirteenth edition. Price $10.00.

* * * *

LOSE WEIGHT AND LIVE—By Robert P. Goldman, Associate Editor of Parade, New York City, with foreword by Harold N. Willard, M. D., Thayer Hospital, Waterville, Maine. Pp. 235, with drawings. Doubleday & Co., Inc., 575 Madison Avenue, New York 22, N. Y. 1961. Price $3.95.

* * * *

MANAGEMENT OF HYPERTENSIVE DISEASES—By Joseph C. Edwards, M. D., Assistant Professor of Clinical Medicine, Cardiovascular Consultant to Division of Gerontology, and Consultant in the Hypertension and the Cardiac Clinics, Washington University School of Medicine and Barnes Hospital, St. Louis, Mo., with foreword by Paul Dudley White, M. D. Pp. 439, with numerous illustrations and figures. The C. V. Mosby Co., 3207 Washington Boulevard, St. Louis 3, Missouri. 1960. Price $15.00.

* * * *

PHARMACOLOGY—The Nature, Action and Use of Drugs—By Harry Beckman, M. D., Chairman, Departments of Pharmacology, Marquette University Schools of Medicine and Dentistry, Milwaukee, Wisconsin. Pp. 805, with illustrations. Second Edition. Philadelphia and London: W. B. Saunders Company. 1961. Price $15.50.

INFORMATION, PLEASE! FOR WOMEN ONLY—By Alfred Dreyfus, II. Pp. 556, including The Dunhill Chart. Vantage Press, Inc., 120 West 31st Street, New York 1, N. Y. 1961. Price $7.50.

* * * *

SYMPTOM DIAGNOSIS—By Wallace Mason Yater, A. B., M. D., M. S., F. A. C. P., Director, Yater Clinic, Washington, D. C.: and William Francis Oliver, B. S., M. D., F. A. C. P., Assistant Clinical Professor of Medicine, University of Southern California School of Medicine. Pp. 1035. Appleton-Century-Crofts, Inc., 35 West 32nd Street, New York 1, New York. 1961. Fifth Edition. Price, $15.00.

* * * *

CLINICAL DISTURBANCES OF RENAL FUNCTION—By Abraham G. White, M. D., Associate Visiting Physician and Chief of the Renal Disease Clinic, Queens Hospital Center, Jamaica, N. Y. Pp. 468, with illustrations. Philadelphia and London: W. B. Saunders Company. 1961. Price $10.50.

* * * *

THE CHANGING YEARS—By Madeline Gray. Pp. 273. Doubleday & Company, Inc. (A Dolphin Book), 575 Madison Avenue, New York 22, New York. 1958, New, revised edition. Price $.95.

* * * *

HANDBOOK OF PEDIATRICS—By Henry K. Silver, M. D., Professor of Pediatrics, University of Colorado School of Medicine, Denver; C. Henry Kempe, M. D., Professor of Pediatrics and Head, Department of Pediatrics, University of Colorado School of Medicine, Denver; and Henry B. Bruyn, M. D., Associate Professor of Pediatrics and Medicine, University of California School of Medicine, San Francisco. Pp. 574. Lange Medical Publications, P. O. Box 1215, Los Altos, California. 1961, Fourth Edition. Price $3.50.

* * * *

HANDBOOK OF SURGERY—Edited by John L. Wilson, M. D., Chief of Surgery, VA Hospital, San Francisco, and Associate Clinical Professor of Surgery, University of California School of Medicine, San Francisco; and Joseph J. McDonald, M. D., Dean of the Faculty of Medical Sciences, American University of Beirut, Beirut, Lebanon. Pp. 644. Lange Medical Publications, P. O. Box 1215, Los Altos, California. 1960. Price $4.00.

* * * *

THE HOUSE OF HEALING.—By Mary Risley. Pp. 288. Doubleday and Company, Inc., 575 Madison Avenue, New York 22, New York. 1961. Price $4.50.

* * * *

TECHNIQUES OF THORACOTOMY.—By B. T. Le Roux, M. D., Senior Registrar, Regional Thoracic Unit, Edinburgh. Foreword by Sir Clement Price Thomas, M. D. Pp. 94, with illustrations by the Medical Photography Unit, University of Edinburgh. The Williams & Wilkins Co., 428 East Preston Street, Baltimore 2, Maryland. 1961. Price $11.00.

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AUGUST
1961

Vol. 58 No. 8

The WEST VIRGINIA Medical Journal

Official Organ of the West Virginia State Medical Association

Box 1031 Charleston 24, W. Va.

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Member 1961

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Trademarked drugs . . .

or "drugs anonymous"?

In the field of medicine, as almost everywhere else in a free economy, the trademark concept has evolved over the years. As with most human institutions, there are some who may not consider it ideal; but it has brought about three signal benefits:

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WVU Medical Center
—News—

• **Compiled from material furnished by Cletis Pride, Public Information Officer, West Virginia University Medical Center, Morgantown, W. Va.**

Six physicians have recently accepted appointment as members of the faculty at the West Virginia University School of Medicine. The appointments were announced by Acting University President Clyde L. Colson.

Dr. Allen E. Yeakel, formerly instructor in anesthesiology at the University of Pennsylvania School of Medicine, has been appointed assistant professor of anesthesiology. Doctor Yeakel is a native of Fair Oaks, Pennsylvania, and received his M. D. degree in 1951 from the University of Pennsylvania School of Medicine. He practiced medicine in Bechtelsville, Pennsylvania, until 1959, when he returned to the University of Pennsylvania to serve a residency in anesthesiology. He is married and the father of four children.

Dr. N. W. Brian Craythorne, former demonstrator in anesthesiology at McGill University School of Medicine in Montreal, Canada, also has joined the Department of Anesthesiology as an assistant professor.

Doctor Craythorne is a native of Belfast, North Ireland, and he received his M. D. degree from Queen's University in North Ireland. He served his internship and had a year of residency training at Belfast City Hospital, and then completed his residency in anesthesiology at the University of Pennsylvania Hospital before moving to McGill in 1959.

Clinical Instructor in Surgery Named

Dr. George W. Easley, assistant chief of the Surgical Service at the VA Hospital in Clarksburg, has accepted appointment as Clinical Instructor in Surgery at the School of Medicine.

A native of Bluefield, Doctor Easley received his M. D. degree from the Medical College of Virginia and was on the staff of the Williamson Memorial Hospital in that city, 1933-49. He also owned and served as administrator of the Tug Valley Clinic and Hospital in Williamson from 1949 to 1957. He joined the VA Hospital staff in 1958.

Doctor Easley is a Fellow of the American College of Surgeons and the International College of Surgeons, and is a member of the Mingo County Medical Society, West Virginia State Medical Association and American Medical Association.

A Philadelphia physician, Dr. Gordon B. Fink, has been named assistant professor of pathology. He recently completed residency training in pathology at the Temple University Hospital, and joined the University faculty on July 1.

Doctor Fink received his M. D. degree from the Temple University School of Medicine and served his internship at Temple University Hospital. He is a member of the College of American Pathologists, the American Heart Association and the Philadelphia Pathology Society.

Dr. Dean R. Goplerud of Iowa City, Iowa, has assumed his duties as instructor in obstetrics and gynecology. He recently completed his residency training at the State University of Iowa Hospitals.

Doctor Goplerud was graduated from St. Olaf College in Minnesota and received his M. D. degree from the State University of Iowa School of Medicine. In 1960, he was awarded first prize for a paper presented at a district meeting of the American College of Obstetrics and Gynecology in Chicago.

Dr. George R. Nugent of Weehawken, New Jersey, has joined the School of Medicine faculty as assistant professor of surgery. He came to the University from the University of Cincinnati School of Medicine, where he was Assistant Director of the Division of Neurosurgery, and also chief of the neurosurgical service at the Cincinnati Veterans Administration Hospital.

Doctor Nugent received his M. D. degree from the University of Cincinnati School of Medicine in 1953, and served his internship and had residency training at the Duke University Medical Center. He is certified by the American Board of Neurological Surgery and is a member of the Cincinnati Academy of Medicine and the Ohio State Medical Association.

Medical Loan Fund Established

A loan fund has been established for students in the School of Medicine as a result of a $500 gift to the West Virginia University Foundation by the West Virginia Chapter of the American Academy of General Practice.

The gift, which will be supplemented by donations from individual members of the Academy, was placed in a Memorial Loan Fund which honors deceased members. All qualified students are eligible for loans from the fund, but preference will be given those planning to enter general practice.

Two donations of $25 each have been received since the fund was established. They came from Dr. Don S. Benson of Moundsville and Dr. Seigle W. Parks of Fairmont, the latter in memory of Charles Lively of Charleston, Executive Secretary of the West Virginia State Medical Association.

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The Month in Washington

• From the Washington Office of the American Medical Association.

THE American Medical Association opposed three major provisions of a bill (S. 1552) that would greatly increase the powers of the federal government in regulation of the ethical drug industry. These three provisions would turn over to the Department of Health, Education and Welfare and the Food and Drug Administration the responsibility for (1) relaying of drug information to physicians, (2) selecting the names of new drugs, and (3) deciding whether a drug is of value in treating human ills.

The AMA didn't take a position on the bill as a whole because certain of its provisions, "such as the Sherman Act and patent law amendments, are outside our area of competence."

AMA Witnesses at Hearings

Dr. Hugh H. Hussey, Jr., Chairman of the AMA Board of Trustees and Dean of Georgetown University School of Medicine, was the chief AMA witness at the opening of hearings on the legislation before the Senate Antitrust and Monopoly Subcommittee headed by Sen. Estes Kefauver (D., Tenn.). Doctor Hussey was accompanied by Dr. Ernest B. Howard, Assistant Executive Vice President of AMA, and C. Joseph Stetler, AMA General Counsel.

With Congress trying for adjournment by about September 1 and much "must" legislation still to be acted upon, it appeared highly unlikely that Congress would complete action on the drug legislation this year.

Doctor Hussey reviewed for the subcommittee the AMA's 70-year-record of taking the lead in endorsing legislation designed to insure the purity of drugs and food. The AMA carried on intensive legislative efforts in the field and "is generally credited with being one of the major forces that brought the first Pure Food and Drug Act into being" in 1906, Doctor Hussey said.

Doctor Hussey cited these AMA aims that "we, as physicians, are desirous of achieving:

"—We want all physicians to be well-trained and fully informed on all aspects of the practice of medicine.

"—We want this body of knowledge and reservoir of skills to include a high degree of competence in the selection and proper use of drugs.

"—We want a continuing and expanding flow of useful drug products placed at the disposal of these physicians."

New Drug Information

Doctor Hussey pointed out that the AMA already conducts an intensive program of informing physicians about new drugs and that this program is now in process of being greatly stepped up.

"The medical profession believes that the education of physicians is the responsibility and perogative of the profession itself," he said.

Assigning responsibility for selecting names of new drugs to the federal government would merely be duplication of the program of drug nomenclature which has been operated for many years by the AMA and the pharmaceutical industry, Doctor Hussey declared. This program also has recently been refined and improved, and will continue to meet the need for an orderly system for selecting names for new drugs.

In the final analysis, it is the physician and the pharmacist who must know the non-proprietary names of drugs, he said. These two professions now direct this naming process, and "we do not believe the responsibility for designating and revising names should be assigned to a governmental agency," he said.

Efficacy of New Drugs

Regarding determination of the efficacy of a new drug, Doctor Hussey said:

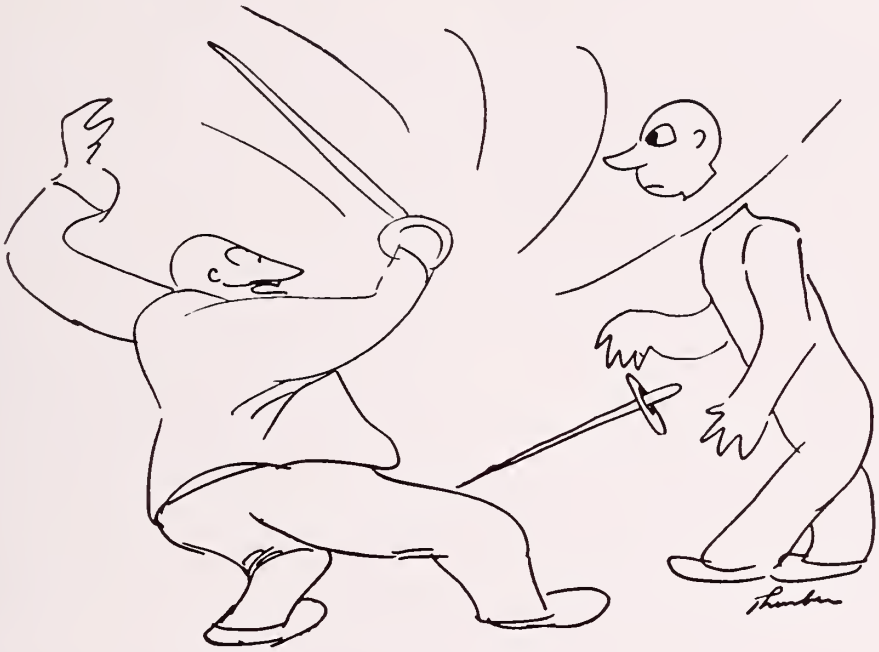
"We believe that only the physician has the knowledge, ability and responsibility to make a decision as to what drug is best for a particular patient. He should not be deprived of the use of drugs that he believes are medically indicated for his patient by a government ruling or decision.

"Physicians seek to treat the medical problems of individual patients. A physician does not treat ten cases of hypertension, he treats ten individual patients, each of whom has a medical problem he has diagnosed as hypertension. He may find that the same dosage of the same form of the same drug will be efficacious in each and all of his ten patients.

"Or he may find that one or more of them need different dosages, or different forms of this same drug. He may, indeed, find that one, two or three of them are allergic to the non-active ingredients used in this brand of the drug, and that a different brand, with other non-active ingredients, is the proper answer.

"Thus, in one patient, a specific dosage of a specific drug might be said to be efficacious. While in another, it would be described as totally ineffective.

"A physician can be told many things about a drug, including its chemistry, its mode of action and, to some extent, its toxic properties. But he must judge its efficacy."



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Obituaries

WORTH B. FORMAN, M. D.

Dr. Worth B. Forman, 71, of Mt. Lebanon, Pennsylvania, died on June 14 at his home in that city following a long illness.

Doctor Forman, who practiced his specialty of surgery in Buckhannon from 1941 until his retirement several years ago, was born in West Milford, West Virginia, on July 17, 1889, son of the late Dr. Lloyd and Audra Williams Forman.

He was graduated from West Virginia Wesleyan College and received his M. D. degree from Temple University School of Medicine in 1924. He practiced in Philadelphia from 1925 until 1941, at which time he moved to Buckhannon. While in Philadelphia, he served as a member of the Temple, Children's and Germantown hospital staffs.

Doctor Forman served for several years as Health Officer in Upshur County. He was a Fellow of the American College of Surgeons and was an honorary life member of the Central West Virginia Medical Society, the West Virginia State Medical Association and American Medical Association.

Besides his widow, he is survived by a daughter, Mrs. James K. Rice of Mt. Lebanon, and two grandchildren.

GEORGE DELBERT JOHNSON, M. D.

Dr. George Delbert Johnson, 78, of Huntington, died on June 6 at a hospital in that city following an illness of several weeks.

Doctor Johnson, who was a native of Cyrus, West Virginia, was born on February 6, 1883, son of the late David and Caroline Cyrus Johnson. He was graduated from West Virginia University and received his M. D. degree from the College of Physicians and Surgeons in Baltimore in 1908. He took postgraduate work at the University of Edinburgh in Scotland.

Doctor Johnson, whose specialty was psychiatry and neurology, served as a physician at the VA Hospital in Huntington. He had also served for several years as superintendent of Spencer State Hospital and in a similar position at a state mental hospital in Kentucky.

In 1958, he was awarded a certificate of honor for his contributions to medicine by the University of Maryland School of Medicine.

He was certified by the American Board of Psychiatry and Neurology and was an honorary life member of the Cabell County Medical Society, the West Virginia State Medical Association and the American Medical Association.

Besides his widow, he is survived by a daughter, Mrs. Murray Tuck of Charleston; and a sister, Miss Herma Johnson of Huntington. A daughter, Miss Adah June Johnson, and a son, Lt. George G. Johnson, preceded him in death.

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THERESA ORA SNAITH, M. D.

Dr. Theresa Ora Snaith, 63, of Weston, died on June 11 at the Ohio State University Hospital in Columbus, following an illness of several months.

Doctor Snaith, who practiced her specialty of pediatrics in Weston for more than thirty years, was the first woman to receive an M. D. degree from the University of Maryland School of Medicine.

She was active for many years in organized medicine and was the first woman physician ever elected to serve as a member of the Council of the West Virginia State Medical Association. She served two terms as a Councillor from the third district.

Doctor Snaith was born in Newburg, West Virginia, on September 2, 1897, daughter of the late Charles M. and Ora Bailey Snaith.

She was educated in the public schools of Lewis County and was graduated from West Virginia University. She received a B. S. degree from the two-year School of Medicine at the University in 1921, and her M. D. degree from the University of Maryland School of Medicine in 1923. She interned at University Hospital, 1923-24, and served a one-year residency there. She also had postgraduate training at Ohio State University School of Medicine and Washington University School of Medicine in St. Louis.

Doctor Snaith was certified by the American Board of Pediatrics and was a member of the American Academy of Pediatrics.

In addition to her active participation in the business affairs of the State Medical Association, she served several terms as secretary of the Central West Virginia Medical Society, and a term as president. She also was a member of the American Medical Association.

She is survived by a brother, Charles B. Snaith of Ripley.

The really good doctor, guided by professional spirit, will always remember that medicine exists for just one purpose—to serve humanity. I like to think of the professional spirit as an unchangeable force in medicine. Its outward forms and applications may change with the times, but its essence is unchangeable.—Leonard W. Larson, M. D.

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REFERENCES

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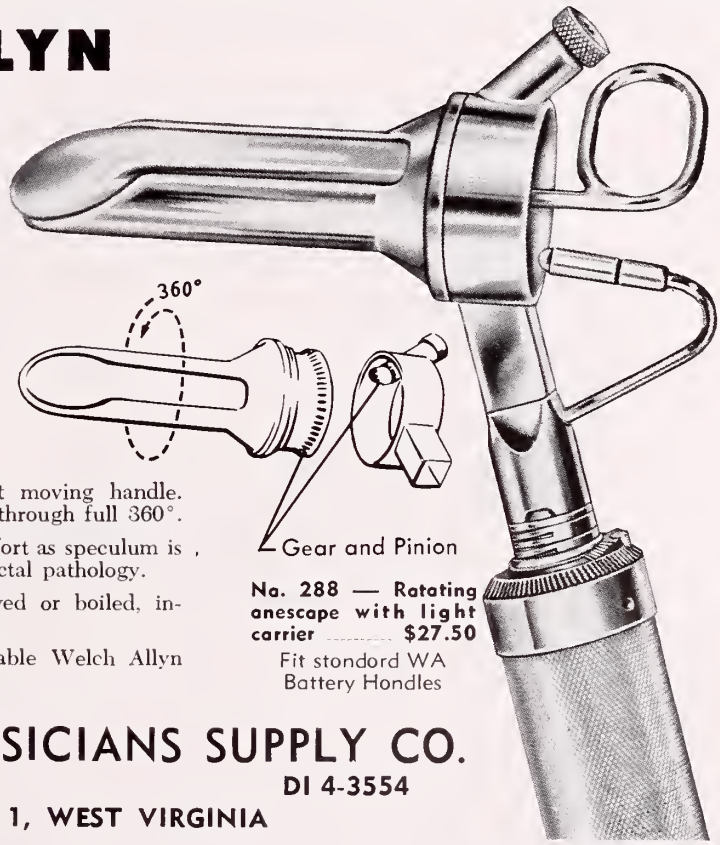

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County Societies

CABELL

Dr. Earl Shirey of Cleveland, Ohio, was the guest speaker at the regular monthly meeting of the Cabell County Medical Society, which was held at the Holiday Inn in Huntington on June 8.

Doctor Shirey, who is a member of the staff at the Cleveland Clinic, presented an interesting paper, together with a film on "Cine-Coronary Arteriography."

Dr. C. Stafford Clay, the president, presided at the dinner meeting which was sponsored by Pfizer Laboratories. More than 150 members and guests were present.

During the meeting, Dr. H. D. Hatfield was elected to honorary life membership in the Society.—W. L. Neal, M. D., Secretary.

* * * *

MONONGALIA

Dr. Harold I. Amory was the guest speaker at the regular monthly meeting of the Monongalia County Medical Society which was held at the Hotel Morgan in Morgantown on June 6.

Doctor Amory, who is Professor of Radiology at the West Virginia University School of Medicine, presented an interesting paper on "Radioisotopes Available at the West Virginia University School of Medicine."

Dr. C. C. Romine, the secretary, presided at the meeting in the absence of the president, Dr. Robert J. Nottingham. Dr. Maynard P. Pride presented a report of the liaison committee to the School of Medicine and several members discussed the referral of patients to the Medical Center.

Dr. J. C. Pickett was elected as an alternate delegate to the annual meeting of the State Medical Association at The Greenbrier in August.—John H. Trotter, M. D., Acting Secretary.

* * * *

WYOMING

The regular quarterly dinner meeting of the Wyoming County Medical Society was held at the Cow Shed in Pineville on June 11. The Woman's Auxiliary also met at that time.

During the business meeting, Drs. Mario Cardenas and Ward Wylie were elected delegates to the annual meeting of the West Virginia State Medical Association at The Greenbrier in White Sulphur Springs, August 24-26. Drs. George F. Fordham and E. M. Wilkinson were named alternate delegates.—Mario Cardenas, M. D., Secretary.

Men who neglect Christ, and try to win heaven through moralities, are like sailors at sea in a storm, who pull, some at the bowsprit and some at the mainmast, but never touch the helm.—Henry Ward Beecher.

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Book Reviews

HANDBOOK OF PEDIATRICS.—By Henry K. Silver, M. D., Professor of Pediatrics, University of Colorado School of Medicine, Denver; C. Henry Kempe, M. D., Professor of Pediatrics and Head, Department of Pediatrics, University of Colorado School of Medicine, Denver; and Henry B. Bruyn, M. D., Associate Professor of Pediatrics and Medicine, University of California School of Medicine, San Francisco. Pp. 574. Lange Medical Publications, P. O. Box 1215, Los Altos, California. 1961. Fourth Edition. Price $3.50.

The authors have published a fourth edition of a very handy, pithy, pocket-sized textbook of pediatrics. Despite its small size, the book is large in content; it has 576 pages and the print is small. There are brief clinical descriptions of a great many entities and a rather complete therapy for each. The book is recent, therefore the treatments are also recent.

One of the useful things about this book is the presence of a number of tables which give valuable information about these subjects uncommonly encountered and, therefore, usually forgotten. It includes such things as the time of appearance of epiphyseal centers of bone, various blood values, recommended drug dosages, lists of poisons, differential list of chemical findings in parathyroid disease, and renal syndromes which mimic parathyroid disease.

There are many charts arranged for use in differential diagnosis of conditions which simulate each other. There is a table of dosage of the various digitalis preparations given by age and route of administration.

New Saunders Books

W. B. Saunders Company features the following recent books in their full-page advertisement appearing on p. vii in this issue:

Cherniack and Cherniack—"Respiration in Health and Disease." Clearly explains the mechanisms by which pathological processes produce clinical findings in respiratory disease.

Fluhmann—"The Cervix Uteri."—Fully covers diagnosis, clinical manifestations, medical and surgical management.

Tenney and Little—"Clinical Obstetrics."—Authoritative management of 24 problems which currently cause difficulty in safe delivery.

Tables are present which show the antibiotics of choice in a large number of infections and which indicate the preferred or acceptable methods of administration.

The authors state their intention to supplement rather than to replace the more complete pediatric text and reference works; they seem to have succeeded

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admirably. This is an excellent book which should be welcome in the hands of practicing pediatricians, interns, residents, or medical students.—Donald M. Burke, M. D.

* * * *

MEDICAL PHARMACOLOGY.—By Andres Goth, M. D., Professor of Pharmacology and Chairman of the Department, The University of Texas Southwestern Medical School, Dallas, Texas. Pp. 551, with numerous illustrations. The C. V. Mosby Company, 3207 Washington Boulevard, St. Louis 3, Missouri. 1961. Price $11.00.

This pharmacology text is a departure from recent trends in that it covers the subject in approximately five-hundred pages instead of the one to two thousand pages which most authors have devoted to the subject during the last two decades. The author's style is concise but covers pharmacology adequately for many students and practitioners without going into the encyclopediac aspects of the subject.

This is the author's first venture into textbook writing in pharmacology and many of his views are new and refreshing. The chapter "Pharmacologic Approach to Hypertension" and the section on "Psycho-pharmacology" are interesting and timely. Official and generic names are used throughout the book with important trade names added parenthetically. The author is to be commended in that he often considers drug cost in the selection of therapeutic agents, especially when long-term therapy is anticipated.—Daniel T. Watts, Ph. D.

* * * *

MANAGEMENT OF HYPERTENSIVE DISEASE—By Joseph C. Edwards, M. D., Assistant Professor of Clinical Medicine, Cardiovascular Consultant to Division of Gerontology, and Consultant in the Hypertension and the Cardiac Clinics, Washington University School of Medicine and Barnes Hospital, St. Louis, Mo., with foreword by Paul Dudley White, M. D. Pp. 439, with numerous illustrations and figures. The C. V. Mosby Co., 3207 Washington Boulevard, St. Louis 3, Missouri. 1960. Price $15.00.

This is the first edition of a very instructive book devoted to a subject wherein our understanding is changing and developing rapidly. As stated in the foreword by Dr. Paul Dudley White, "It clearly and succinctly presents the present status of hypertension and its treatment." The book is a guide to the practical management of the hypertensive patient. It contains 11 chapters and 361 pages.

Chapters 1 and 2 are devoted to a definition and diagnosis of various types. Chapter 3 is a review of the treatment of heart disease with hypertension. The author recommends, for all hypertensive patients with chronic decompensation, anticoagulant therapy.

There is a chapter devoted to electrocardiogram findings in hypertension, which general practitioners and internists will find interesting.

The importance of the subject can be appraised by the author's statement on prognosis, "More than one-fifth of all deaths are directly or indirectly due to the results of hypertension. With the exception of arteriosclerosis, hypertension is the major cause of death in the United States."

In a long chapter on management wherein therapy is classified according to the severity of the disease, the

author recommends the conservative use of rest and relaxation along with sedatives and tranquilizers. He does not recommend rigid salt restriction if drug therapy is used and he states, "drug therapy is necessary in grade 3 and 4 and sometimes in grade 2 patients."

There are chapters devoted to special types of hypertension and to hypertension in pregnancy.

In the concluding chapter on etiology, the author begins, "The underlying mechanism of the benign type of essential hypertension and of hypertensive vascular disease is unknown." There is ample discussion of the many (10) possible causes.

The book has more than 1600 references, the vast majority of which have been written in the past 3 years, indicating the intense recent interest in the subject.

This is an excellent new book with much recent information on an old subject. All clinicians interested in this topic will find here the latest information, well documented and well organized.

Books Received

AIDS TO PHYSIOLOGY.—By E. T. Waters, Ph.D., D.Sc., Senior Lecturer in Physiology, University of Wales, Cardiff; and formerly Associate Professor of Physiology, University of Toronto. Pp. 282, with illustrations. (Exclusive U. S. Agents, The Williams & Wilkins Company, Baltimore 2, Maryland). 1961. Fifth Edition. Price $3.00.

* * * *

MEDICAL PHARMACOLOGY.—By Andres Goth, M. D., Professor of Pharmacology and Chairman of the Department, The University of Texas Southwestern Medical School, Dallas, Texas. Pp. 551, with numerous illustrations. The C. V. Mosby Company, 3207 Washington Boulevard, St. Louis 3, Missouri. 1961. Price $11.00.

* * * *

MEMOIRS OF A MEDICO—By E. Martinez Alonso. Pp. 335. Doubleday and Company, Inc., 575 Madison Avenue, New York 22, New York. 1961. Price $4.50.

* * * *

THE CARDIAC ARRHYTHMIAS.—By Brendan Phibbs, M. D. Pp. 128, with numerous illustrations. The C. V. Mosby Company, 3207 Washington Blvd., St. Louis 3, Missouri. 1961. Price $7.50.

* * * *

RELIEF OF SYMPTOMS—By Walter Modell, M. D., Director of Clinical Pharmacology and Associate Professor of Pharmacology, Cornell University Medical College, New York, N. Y. Pp. 374, with tables. The C. V. Mosby Company, 3207 Washington Boulevard, St. Louis 3, Missouri. 1961. Second Edition. Price $11.50.

* * * *

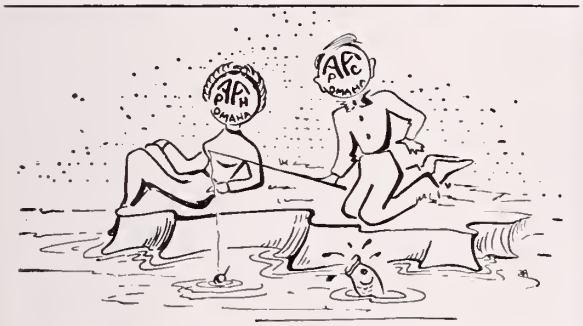
A TRAVELER'S GUIDE TO GOOD HEALTH.—By Colter Rule, M. D., New York City. Pp. 240. Doubleday & Company, Inc., 575 Madison Avenue, New York. 1960. Price $.95. (A Dolphin Handbook).

* * * *

HEALTH EDUCATION: A guide for Teachers and a Textbook for Teacher Education.—Edited by Bernice R. Moss, Ed.D.; Warren H. Southworth, Dr. P. H.; and John Lester Reichart, M. D. Published by the National Education Association of the United States, 1201 16th Street, N. W., Washington 6, D. C. 1961. Fifth Edition.

* * * *

HOSPITALS, DOCTORS, AND DOLLARS.—By Robert M. Cunningham, Jr., Editor of the Modern Hospital. Pp. 268. F. W. Dodge Corporation, 119 West 40th Street, New York 18, New York. 1961. Price $6.95.



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J. L. RITTMEYER, M. D.
ERNEST G. GUY, M. D.

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Anatomic Pathology: S. D. WU, M. D.

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Voluntary Health Insurance Coverage

Some 132 million Americans—73 per cent of the civilian population—had health insurance at the end of 1960, the Health Insurance Council announced recently in reporting the results of its 15th annual survey on the extent of voluntary health insurance coverage in the United States. The survey is based on reports from insurance companies, Blue Cross-Blue Shield, and other health care plans.

The Council said both the number of persons covered by some form of health insurance and the amount of benefits paid reached new highs last year. Coverage increased by 4.1 million during 1960 to reach a total of 131,962,000 persons.

Benefit payments by all health insuring organizations to help cover the cost of hospital, surgical and medical care amounted in 1960 to more than $4.8 billion, up $500 million over 1959, said the Council. In addition, persons with loss-of-income policies received $839 million in benefits from insurance companies to replace income lost through disability. Thus, a grand total of $5,688,000,000 in health insurance benefits were distributed during 1960, up 10.1 per cent over 1959.

The HIC, a federation of eight insurance associations, said that based on early trends for 1961 it estimated that as of June 1, 1961, some 134 million persons (74 per cent of the civilian population) had hospital expense insurance, 123 million had surgical expense insurance, 89 million had regular medical expense insurance, 31 million had major medical expense insurance, and 42.5 million were insured against loss of income, or had some other formal sick leave pay arrangement.

The Council said these figures also revealed the breadth of health insurance protection which Americans have. The organization said that as of June 1, 92 per cent of persons with health insurance had both hospital and surgical expense insurance, and 66 per cent had hospital, surgical and regular medical expense insurance, which helps pay for doctor visits for non-surgical care. Five years ago, the figures were, respectively, 85 and 52 per cent.

Meeting of Soc. of Nuclear Medicine

Dr. Lindon Seed of Chicago was elected president of the Society of Nuclear Medicine during the eighth annual meeting held recently in Pittsburgh.

Prof. George C. DeHevesy of the University of Stockholm, Sweden, winner of the 1943 Nobel Prize in Chemistry, and the second Atoms for Peace Award in 1959, presented the second of the annual Lecture Series—a series of lectures dedicated to pioneers in nuclear medicine—in honor of Marie and Pierre Curie, and Henri Becqueral.

It was announced that the ninth annual meeting of the Society will be held at the Baker Hotel in Dallas, Texas, June 27-30, 1962.

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Urological Assn. Essay Contest

The American Urological Association has announced that it will offer an annual award of $1,000 (first prize of $500, second prize $300, and third prize $200) for essays on the result of some clinical or laboratory research in urology.

Competition is limited to urologists who have been graduated not more than 10 years, and hospital interns and residents doing clinical or laboratroy research work in urology. The first prize winner will be invited to appear on the program at the annual meeting of the AUA in Philadelphia, May 14-17, 1962.

Additional information may be obtained by writing to the Executive Secretary of the AUA, William P. Didusch, 1120 North Charles Street, Baltimore 1, Maryland.

Fracture Assn. Meeting in Washington

The 22nd annual meeting of the American Fracture Association will be held at the Shorehan Hotel in Washington, D. C., September 16-23. One of the features of the meeting will be a postgraduate course in orthopedic surgery and fractures, which will be held in the Georgetown University School of Medicine on Sunday, September 17.

The course will be conducted by members of the staff of the medical school. Further information concerning the meeting may be obtained by writing to Dr. H. W. Wellmerling, 610 Griesheim Bldg., Bloomington, Illinois.

World Medical Meeting in Brazil

The 15th General Assembly of the World Medical Association will be held at the Copacabana Palace Hotel in Rio de Janerio, Brazil, September 15-20.

Special topics on the program of the Assembly will include increased cost of medical care under Social Security schemes, draft code of human experimentation and world problems of medical education.

Additional information concerning the Assembly may be obtained by writing the Secretary-General, World Medical Association, 10 Columbus Circle, New York 19, New York.

Dr. Gundersen Heads Blood Council

Dr. Gunnar Gundersen of LaCrosse, Wisconsin, was elected president of the Joint Blood Council at the annual meeting of that organization in New York City on June 26. Doctor Gundersen is a past president of the American Medical Association.

Other officers elected or reelected were Drs. Kenneth B. Babcock of Chicago, Illinois, vice president; Sam T. Gibson of Washington, D. C., treasurer; Frank E. Wilson of Washington, D. C., executive vice president; and E. Eric Muirhead of Detroit, Michigan, chairman of the Scientific Committee.

The activities of the Council, which was formed as a nonprofit corporation six years ago, include the publication of a Directory of Blood Transfusion Facilities and Services and Standards for a Blood Transfusion Service.

OFFICERS OF COMPONENT SOCIETIES

Society	President		Secretary		Meetings
Barbour-Randolph-Tucker	John L. Rittmeyer	Philippi	Charles L. Leonard	Elkins	3rd Thurs.
Boone	W. L. Barbour	Whitesville	H. H. Howell	Madison	2nd Wed.
Brooke	James E. Wise	Follansbee	H. L. Hegner	Wellsburg	
Cabell	C. Stafford Clay	Huntington	W. L. Neal	Huntington	2nd Thurs.
Central West Virginia	Harold D. Almond	Buckhannon	R. L. Chamberlain	Buckhannon	As Scheduled
Eastern Panhandle	Jules F. Langlet	Charles Town	F. A. Hamilton, Jr.	Martinsburg	2nd Wed.
Fayette	W. P. Bittinger	Summerlee	Ivan H. Bush, Jr.	Oak Hill	1st Wed.
Greenbrier Valley	Eugene McClung	Lewisburg	E. L. Crumpacker	White Sul. Spgs.	2nd Wed.
Hancock	E. M. Clubb, Jr.	Weirton	Edward A. Gretchen	Weirton	2nd Tues.
Harrison	Harry T. Linger	Bridgeport	A. Robert Marks	Clarksburg	1st Thurs.
Kanawha	William B. Rossman	Charleston	A. B. Curry Ellison	Charleston	2nd Tues.
Logan	Henry Bobroff	Man	Charles K. Rath	Logan	2nd Wed.
Marion	F. W. Mallamo	Fairmont	G. Thomas Evans	Fairmont	Last Tues.
Marshall	H. B. Ashworth	Moundsville	J. W. Myers	Moundsville	Semi-Ann.
Mason	Lewis D. Telle	Pt. Pleasant	Dan Glassman	Pt. Pleasant	Bi-Monthly
McDowell	Louis Vega	Welch	George L. Fischer	Welch	2nd Wed.
Mercer	Henry F. Warden, Jr.	Bluefield	John J. Mahood	Bluefield	3rd Mon.
Mingo	A. H. Henderson	Williamson	Robert J. Tchou	Williamson	2nd Wed.
Monongalia	R. J. Nottingham	Morgantown	C. C. Romine	Morgantown	1st Tues.
Ohio	S. S. Bobes	Wheeling	H. G. Dickie	Wheeling	4th Tues.
Parkersburg Academy	William E. Gilmore	Parkersburg	Robert C. Lincicome	Parkersburg	1st Thurs.
Potomac Valley	H. Luke Eye	Franklin	Philip G. Staggers	Keyser	2nd Wed.
Preston	D. R. Davis	Kingwood	C. Y. Moser	Kingwood	4th Thurs.
Raleigh	Harry F. Cooper	Beckley	Thomas L. Martin	Beckley	3rd Thurs.
Summers	D. W. Ritter	Hinton	B. W. McNeer	Hinton	3rd Mon.
Taylor	Paul P. Warden	Grafton	R. D. Stout	Grafton	Last Thurs.
Wetzel	Lemoyne Coffield	New Martinsville	C. P. Watson, Jr.	New Martinsville	Monthly
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Are we to forsake for ourselves the cherished freedom we encourage for others? The fierce demands of freedom must be realized and acted upon if we are to preserve the freedom. We must not allow ourselves to be distracted from our proper duties and responsibilities by socialistic brush fires. Far better to keep the torch of liberty burning brighter by our continued day by day service.

Only in this manner can we as a nation have the proper relationship to organized government, where it properly exists to serve the people without destroying the individual. In this climate there has been unparalleled growth since our nation's beginning. In this climate of freedom we will continue this growth, and thereby more ably serve our fellow man. Join with me and all others who have respect for the past, and hope for tomorrow, to have conviction in our present ideals.—Leif H. Lokvam, M. D., in the Wisconsin Medical Journal.

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C. B. Buffington, M. D.

Thoracic Surgery:
Daniel W. Dickinson, M. D.

Obstetrics and Gynecology:
Robert W. Leibold, M. D.
Robert T. Brandfass, M. D.

Urology:
Richard D. Gill, M. D.

Neurological Surgery:
James S. Rogers, M. D.
Frank M. Hudson, M. D.

Internal Medicine:
William M. Sheppe, M. D.
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(1) Carter, S.: *M. Clin. North America* 37:315, 1953.
(2) Maltby, G. L.: *J. Maine M. A.* 48:257, 1957.
(3) Buchthal, F.; Svensmark, O., & Schiller, P. J.: *Arch. Neurol.* 2:624, 1960.

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—News—

SIXTEEN fourth-year students in the School of Medicine have been following an intensive schedule of study and clinical work since mid-June. Students successfully completing the program will receive the state's first M. D. degrees on June 4, 1962.

The following is a list of the members of the class:

Richard B. Arnold, Huntington, Halbert E. Ashworth, Charleston, Frederick M. Cooley, Nitro, Basil D. Cutlip, Jr., Webster Springs, Francis A. Goad, Clendenin, Jesse S. Griffith, Charleston, Louis B. Groves, Meadow Bridge, and Larry Hemmings, Jr., Charleston.

Charles L. Ladwig, Lost Creek, Charles W. Lewis, Huntington, George H. Nelson, Morgantown, Joseph B. Reed, Burlington, Joseph Ruggiero, Fairmont, Kenneta Jean Shaffer, Morgantown, Watson G. Watring, Beverly, and David White, Morgantown.

Dean Clark K. Sleeth said each of the seniors will spend at least three-fourths of the year at the University Medical Center. During the remaining three months, they will be expected to further their medical education through study here or at another authorized institution.

New Members of Faculty

Dr. Ruth Marjory Phillips of Boston has accepted appointment as Clinical Assistant Professor of Pediatrics at the School of Medicine. Her appointment was announced last month by Acting University President Clyde L. Colson.

Doctor Phillips previously was a member of the pediatrics faculty at the Boston University School of Medicine, in addition to serving as a pediatrician in the United States Public Health Service's chronic disease program. Prior to that, she was chief resident and fellow in tumor therapy with the Children's Cancer Research Foundation, Children's Medical Center, Boston.

She was graduated from Mount Holyoke College and received her M. D. degree from the Johns Hopkins University School of Medicine. She served a rotating internship at Vancouver (British Columbia) Hospital, 1948-49, prior to returning to Johns Hopkins for a two-year internship and a two-year residency in pediatrics.

Doctor Phillips is a member of Phi Beta Kappa and the Johns Hopkins Medical and Surgical Society. She is the wife of Dr. Robert R. Trotter who recently joined the staff of the Department of Surgery as Clinical Associate Professor and Chairman of Ophthalmology.

Dr. Grant E. Gauger of Seattle, Washington, has been appointed Instructor in the Department of Gross and Neurological Anatomy. He recently completed an internship at Deaconess Hospital in Spokane, Washington. He received his M. D. degree from the University of Washington School of Medicine, and held summer research fellowships in anatomy and neuropathology.

Compiled from material furnished by Cletis Pride, Public Information Officer, West Virginia University Medical Center, Morgantown, W. Va.

New Member of Pathology Faculty

Dr. Won Bong Hahn of Seoul, Korea, has accepted appointment as senior fellow in pathology and medicine. He received his medical training at Seoul University and served an internship at Alexian Brothers Hospital in Elizabeth, New Jersey. He had residency training in two New Jersey hospitals and served as a fellow in pathology at Cook County Hospital in Chicago, and as assistant in pathology at Illinois Masonic Hospital in that city.

NIH Training Grants Renewed

The University has been awarded $20,833 by the National Institutes of Health to support its graduate training program in pharmacology through next June 30. The federal agency has pledged the program its support for five years following July 1, 1962 and plans to grant the University $128,780 in annual installments during that period.

Dr. Daniel T. Watts, Professor and Chairman of the Department of Pharmacology, said the grant will help students working toward masters and doctorate degrees, as well as physicians and dentists doing special work in pharmacology.

Dr. David W. Northup, Professor and Chairman of the Department of Physiology, also announced that the NIH had also renewed a grant to support the University's training program in physiology. In making the renewal, the NIH indicated it plans to support the program through June 30, 1965, at a total cost of $73,223.

Doctor Northup said the grant will aid candidates studying toward masters and doctorate degrees. Three currently are enrolled in the program, one working toward a doctoral degree and two in pursuit of master of science degrees. The money also will be used to buy drugs and supplies, enable students to attend scientific meetings, and make it possible for them to hear special lectures.

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The Month in Washington

• **From the Washington Office of the American Medical Association.**

THE American Medical Association cited more than 50 reasons why the vast majority of the nation's physicians believe the Administration's medical care program would be "bad medicine for the people of this country." The AMA's objections to the proposal were spelled out in a detailed, 91-page printed statement presented to the House Ways and Means Committee by Dr. Leonard W. Larson of Bismarck, North Dakota, president of the AMA.

The committee held two weeks of hearings (July 24-Aug. 5) on the Administration proposal (H. R. 4222) which would provide limited hospitalization, nursing home care and outpatient diagnostic services for social security recipients. The program would be financed by an increase in payroll taxes on workers, employers and self-employed.

Doctor Larson declared that the Administration program would force upon Americans a system of health care in which the quality of medical care would deteriorate, in which quality would become secondary to cost. He said American medicine is the best in the world, medical education unsurpassed and the qualifications of U. S. physicians unmatched.

'Dynamic System of Health Care'

"Ours is a dynamic system of health care—and it works," he said. "The very fact that we now have 16½ million Americans 65 years of age and older proves that it works.

"Yet, this same system of medical care is now under attack. At a moment when American medicine is pre-eminent throughout the world, it is proposed that we adopt the very systems under which one European nation after another has lost its former leadership in medical science.

"The staggering costs of such plans, the administrative problems they create—let these considerations be secondary", he said. "The important thing is to see, at close range, the disruption of the doctor-patient relationship; the delays in admission to hospitals; the time wasted in the over-crowded offices of doctors; the regimentation of medical practice; the effect of the program on medical research; the availability of medical facilities and personnel—in other words, medicine in action on a government-run, assembly-line basis."

Doctor Larson said also:

1. Congress is being asked to plunge into a compulsory government-operated program of health care for certain of the country's elderly without knowing what even the first-year cost will be—whether $1 billion or $4 billion—and without any clear idea of the extent of the problem it seeks to solve.

2. The bill under consideration would give a single government official the power to "become the nation's czar of hospital care."

3. Contrary to statements of supporters of the measure that physicians' services are not included in the program, more than 50,000 doctors would be directly affected by regulations and controls exercised by government over operations and administration of hospitals.

4. Enactment of the program would "lower the quality of medical care available to the older people of the United States" because "it would introduce into our system of freely practiced medicine elements of compulsion, regulation and control" by government.

5. The Administration proposal is unnecessary in light of the true economic status of the aged and because of the spectacular rise of voluntary, private health insurance coupled with passage by Congress of the Kerr-Mills Medical Aid for the Aged Law last year and the existence of other public and private programs of aid to the needy.

6. Health care at the expense of the working people would be provided for millions who are financially able to pay for their own care.

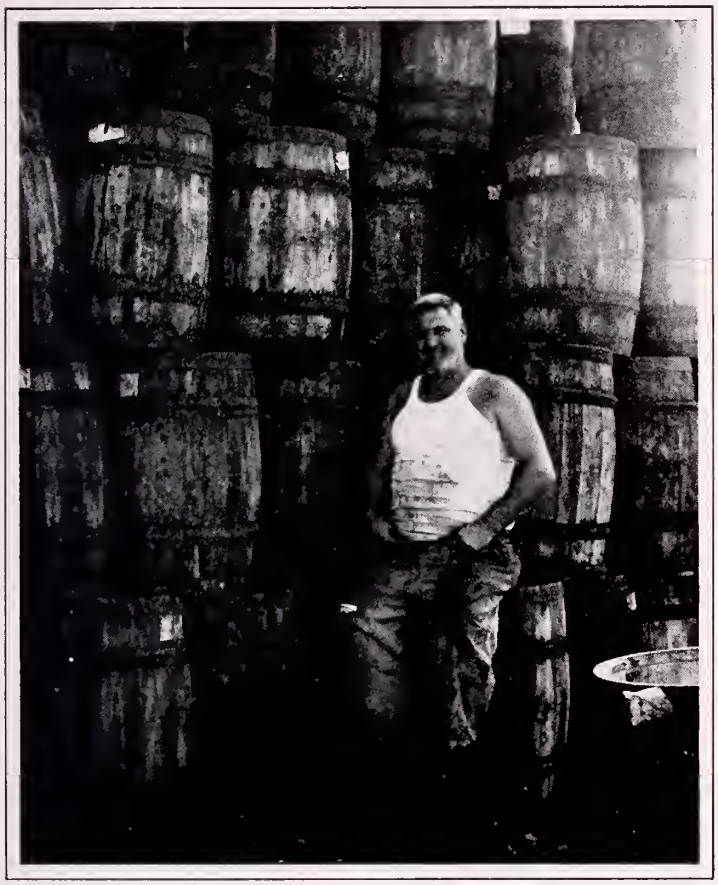
7. The legislation "proposes that we distrust the brains and capacities of today's Americans" because "it suggests that the aged—as an entire group—are not capable of looking after their own affairs and providing for their own needs."

8. Increasing costs of the program could impose such a financial strain on social security that the entire system could be jeopardized.

9. The Administration's bill is just as objectionable as the five similar health care proposals rejected by Congress since 1942.

10. The bill would violate "American ideals of independence, self-sufficiency and personal responsibility" by establishing a system in which medical aid would be provided not on the basis of need but on the basis of age.

The AMA president reminded committee members that HEW Secretary Abraham Ribicoff had told them that "a closer study" had revealed it would be necessary to increase the taxable wage base from the present $4,800 to $5,200, rather than the $5,000 fixed in the bill when it was introduced.



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Obituaries

CHARLES E. WATKINS, M. D.

Dr. Charles E. Watkins, 52, of Oak Hill, a Past President of the West Virginia State Medical Association, died at a hospital in that city on July 27. He had been ill for several months.

Charles E. Watkins, M. D.

Doctor Watkins was born at Grafton on February 25, 1909, son of Fred B. and Minnie Shorden Watkins. He was graduated from West Virginia University and received a B. S. degree from the two-year School of Medicine in 1933. He received his M. D. degree from the Medical College of Virginia in 1935. He served an internship at Charleston General Hospital, 1935-36, and also had postgraduate training in public health at the University of North Carolina.

He was licensed to practice in West Virginia in 1936 and was located at Fayetteville before moving to Oak Hill in 1938, where he practiced continuously until his recent illness. He served for several years as health officer in Fayette County and also was physician for the New River Coal Company.

Doctor Watkins was a member of the Fayette County Medical Society, the West Virginia State Medical Association and American Medical Association. He served a term as president of his local society and was president of the State Medical Association in 1950.

He was a former member of the West Virginia University Athletic Council and a past president of the WVU School of Medicine Alumni Association. He also was a former member of the WVU School of Physical Education Visiting Committee.

Besides his widow, the former Mary Alice Davis of Morgantown, he is survived by two sons, Charles, a student at West Virginia University, and William Hale of Alexandria Virginia, an attorney associated with the Federal Communications Commission; one brother, A. Hale Watkins of Charleston; and two grandchildren.

* * * *

CARL CURTIS JACKSON, M. D.

Dr. Carl Curtis Jackson, 61, of East Rainelle, died on July 30 while attending church services. Death was attributed to a heart attack.

Doctor Jackson, who practiced in East Rainelle for 31 years, was born at Elkview, Kanawha County, on December 12, 1899, son of the late Mr. and Mrs. Charles B. Jackson.

He was graduated from West Virginia University and received his M. D. degree from the Medical Col-

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lege of Virginia in 1927. He served an internship and had residency training at the McKendree Hospital in Welch.

He served as a member of the Greenbrier County Court for 24 years and was a member of the Greenbrier Valley Medical Society, the West Virginia State Medical Association, Southern Medical Association and American Medical Association.

Besides his widow, he is survived by four daughters, Mrs. Robert Long of Buffalo, New York, Mrs. Mollie Spencer of Huntington, and Miss Delores Jackson and Miss Sue Jackson, both at home; a son, Carl C. Jackson, Jr., of Rainelle; two sisters, Mrs. Eunice Snyder of Elkview and Mrs. Vilva Copenhaver of Big Chimney; a brother, A. L. Jackson of Charleston; and five grandchildren.

* * * *

GEORGE W. PHILLIPS, M. D.

Dr. George W. Phillips, 84, of Morgantown, died on August 1 in a hospital in that city eight days following an automobile accident in which he suffered critical injuries.

Doctor Phillips, who served as Mayor of Morgantown, 1934-35, and as a member of the Board of Education for 16 years, was born at Spragg, Pennsylvania, on September 30, 1877, son of the late Jesse and Deborah Phillips.

He was graduated from Waynesburg College and received his M. D. degree from the University of Pittsburgh School of Medicine in 1904. He located at Blacksville that same year and practiced there until he moved to Morgantown in 1923. He had continued in active practice until 1955.

He served a term as treasurer of the Monongalia County Medical Society in 1948, and was a member of the West Virginia State Medical Association and American Medical Association.

Besides his widow, he is survived by one daughter, Mrs. John Trotter of Morgantown, three grandchildren and three great-grandchildren.

* * * *

WILL AMICK QUIMBY, M. D.

Dr. Will Amick Quimby, 80, of Wheeling, died on July 31 in a hospital in Martins Ferry, Ohio.

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Doctor Quimby, who practiced his specialty of radiology in Wheeling for more than 40 years, was born in that city on August 19, 1881, son of the late C. H. and Sarah (Baker) Quimby.

He attended Linsley Institute in Wheeling and received his M. D. degree from the Ohio State University School of Medicine in 1908. He interned at Miami Valley Hospital in Dayton, Ohio, 1908-09, and had postgraduate training in New York City.

He was an honorary life member of the Ohio County Medical Society, the West Virginia State Medical Association and American Medical Association.

He is survived by two brothers, Charles of Washington, D. C., and John of Denver, Colorado.

The Art of Medicine

Medical science has reached an acme of progress. New discoveries constantly are broadening the horizons of medical knowledge. Diseases commonplace and epidemic fifty years ago, today are seldom seen in this country. Most young physicians have never treated a case of small pox, typhoid or diphtheria. Operations undreamed of at the turn of the century today are routine. This is the golden age of medical science. As a result life expectancy in the U.S.A has been raised to new highs.

One would think that American medicine, which, in one generation, has given to the people the best medical care in the world, would be acclaimed by the citizenry. Instead, the medical profession is the butt of carping criticism. Could it be that we, as physicians, have failed to "sell" ourselves to the public? Fifty years ago, the doctor of medicine was held in the highest esteem by the community. Why has public opinion changed? Do the physicians of today neglect the art of medicine, so deftly practiced by previous generations of medical men?

The physician-patient relationship implies a close bond between the sick person and his doctor. It requires doing more than our scientific best for our patients. It means that our scientific approach to our patient's medical problems should be tempered with kind and loving care. This is the art of medicine. It implies taking time to hear our patients complaints and to explain their medical problems to them. It requires encouragement by the physician of the disheartened, depressed and the weak of spirit. The art of medicine is practiced when the doctor treats his patients with understanding, compassion, consideration for their feelings, foibles and prejudices.

The physician who practices scientific medicine but who fails to employ the art of medicine, may cure the body yet leave the mind of the patient embittered toward his medical benefactor. If the public has the opinion that the modern doctor of medicine is a cold, detached scientist who looks upon his patient as an "interesting case", rather than as a sick human being, who is to blame? Insofar as we fail to practice the art of medicine, each of us is to blame.—John G. Slevin, M. D., in Detroit Medical News.

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County Societies

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Dr. Robert Seller of Philadelphia was the guest speaker at the regular bi-monthly meeting of the Mason County Medical Society which was held at the Gene Ball Restaurant in Pt. Pleasant on July 10.

Doctor Seller, who is a member of the faculty at Hahnemann Medical College, presented an interesting paper on "Medical Management of Hypertension."

The program was sponsored by the Merck, Sharp and Dohme Postgraduate Program.

During the business meeting, Drs. C. Leonard Brown and J. Stewart Lloyd were named delegates to the Annual Meeting of the State Medical Association.—Dan Glassman, M. D., Secretary.

Hospital Benefits Climbing Rapidly

Benefits paid to persons covered by hospital expense insurance are increasing much more rapidly than the number of persons with such insurance, the Health Insurance Institute reported recently.

From 1959 to 1960, the rate of increase in hospitalization benefits almost quadrupled the growth of persons with hospital insurance, while from 1952 through 1960 the growth rate of benefits more than quadrupled that of persons covered.

The number of persons covered by hospital expense insurance provided by insurance companies, Blue Cross-Blue Shield, and other health care plans rose from 127,896,000 at the end of 1959 to 131,962,000 at the end of 1960, an increase of 3.2 per cent. At the same time, benefits to pay for the costs of hospital care climbed from $2,889,000,000 in 1959 to $3,250,000,000 in 1960, a boost of 12.5 per cent, and almost quadrupled the rate of increase in coverage.

At the end of 1952, some 90,965,000 Americans had hospital expense insurance so that the climb to nearly 132 million at the end of 1960 meant an increase of 45.1 per cent. Hospital expense benefits in 1952 amounted to $1,072,000,000 and increased by 203.2 per cent, more than quadruple the coverage growth for the same period, to reach the 1960 total of almost $3.3 billion.

Both hospital benefits and the number of persons covered by hospital insurance have increased every year since 1952, which the Institute said was the first year that health insurance benefits were broken down on an industry-wide basis according to the type of service for which they paid.

The Institute said this pattern of year-by-year growth in benefits and coverage also holds true for surgical and regular medical insurance, which helps pay for doctor visits for non-surgical care.

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Book Reviews

THE CARDIAC ARRHYTHMIAS—By Brendan Phibbs, M. D. Pp. 128, with numerous illustrations. The C. V. Mosby Company, 3207 Washington Blvd., St. Louis 3, Missouri. 1961. Price $7.50.

There have been many textbooks written on Electrocardiography with chapters on the Arrhythmias and there are also a few textbooks covering only this subject. Most of these are exceedingly difficult for the average practitioner to read and understand. There is a great deal of information that is clouded by the exceptions and the atypical forms, however, this tends to confuse everyone except the astute student who limits himself to this field.

Doctor Phibbs has written a clear, concise book that is easily interpreted. His diagrams are well chosen and easily understood. His electrocardiograms are quite typical of the lesson he is attempting to convey. There is also the added advantage of a short, concise treatise on the therapy of each condition so that one could easily refer to this book after an electrocardiographic diagnosis has been made and find the proper treatment. Doctor Phibbs has purposely avoided controversial subjects and atypical patterns.

This book was written primarily for the practitioner and it fulfills this desire excellently. He is to be congratulated because at last we have a book for the average medical man that can be used not only for instruction but as a reference model in his practice.—I. E. Buff, M. D.

* * * *

SYMPTOM DIAGNOSIS—By Wallace Mason Yater, A. B., M. D., M. S., F. A. C. P., Director, Yater Clinic, Washington, D. C.; and William Francis Oliver, B. S., M. D., F. A. C. P., Assistant Clinical Professor of Medicine, University of Southern California School of Medicine. Pp. 1035. Appleton-Century-Crofts, Inc., 35 West 32nd Street, New York 1, New York. 1961. Fifth Edition. Price $15.00.

This is the fifth edition of a well accepted book (the first edition was printed 35 years ago), the purpose of which as expressed in the preface to the first edition is threefold. (1).—to aid the busy physician by allowing him to reduce the diagnostic possibilities of a case to a small number, (2).—prevent oversight of important considerations, and (3).—to make the physician more observant of characteristic symptoms.

It is not a study book, but a quick desk reference manual. The contents include regional symptoms in sections from head to lower extremity and general symptoms from amnesia to weight loss. There is an appendix of personal name diseases or symptoms and an appendix of syndromes. The index seems to be complete. In all instances there is a good deal of cross reference.

There is a brief but adequate description of the symptom under the term, "characteristics," and some

helpful historical reference is present under "chief signs." There is no reference to etiology or therapy, or laboratory findings, or indications.

There is a great fund of information in this book and by its arrangement on outstanding symptom and sign, will rapidly and frequently indicate diagnosis without further reference. Familiarity with the book is necessary if it is to serve its announced purpose.

The book can be highly recommended to the reference library of all physicians.

* * * *

GOOD-BYE TO DOCTOR ROCH—By Andre Soubiran, M. D. Pp. 331. Doubleday and Company, Inc., Garden City, New York. 1961. Price $4.50.

This very interesting story about life in a mental hospital is written in the first person by one who has been committed to the institution from prison. The love interest is afforded by his wife who becomes the personal secretary to the medical director, Doctor Roch, who at one time was confined to the Dochou concentration camp. Doctor Roch is very much disturbed by the medieval and cruel customs still prevalent in a modern mental hospital, and his attempts at improvement meet with both open and ill-concealed efforts of the older staff members in opposition to any change. The book is easy to read, and will maintain your interest to the end. It has everything—shock, intrigue, love, and a suggestion of sex.—James S. Klumpp, M. D.

Books Received

VARICOSE VEINS—By R. Rowden Foote, with the assistance of A. Gordon Dingley, M. A., M. Chir. (Cantab.), F. R. C. S., Consultant Surgeon to the Southend-on-Sea Group of Hospitals, London. Pp. 356, with numerous illustrations and photographs. (Exclusive U. S. Agents, The Williams & Wilkins Co., Baltimore 2, Maryland). 1960. Third Edition. Price $13.00.

* * * *

GOOD-BYE TO DOCTOR ROCH—By Andre Soubiran, M. D. Pp. 331. Doubleday and Company, Inc., Garden City, New York. 1961. Price $4.50.

* * * *

PATHOLOGIC PHYSIOLOGY—By William A. Sodeman, M. D., Dean and Professor of Medicine, Jefferson Medical College, Philadelphia. Pp. 1182, with numerous illustrations. Third Edition. Philadelphia and London: W. B. Saunders Company. 1961. Price $15.00.

* * * *

THORACIC DISEASES—By Eli H. Rubin, M. D., F. A. C. P., F. C. C. P., Professor of Clinical Medicine, Albert Einstein College of Medicine, Yeshiva Univ.; and Morris Rubin, M. D., F. A. C. S., F. C. C. P., Associate Clinical Professor, Thoracic Surgery, Albert Einstein College of Medicine, Yeshiva University; in association with George C. Leiner, M. D., F. A. C. P., F. A. C. C., Columbia Univ., College of Physicians and Surgeons; and Doris J. W. Escher, M. D., Columbia University, College of Physicians and Surgeons. Pp. 968, with illustrations. Philadelphia & London: W. B. Saunders Company. 1961. Price $25.00.

* * * *

MAYO CLINIC DIET MANUAL—By The Committee on Dietetics of the Mayo Clinic. Pp. 222. Third Edition. Philadelphia and London: W. B. Saunders Company. 1961. Price $5.50.

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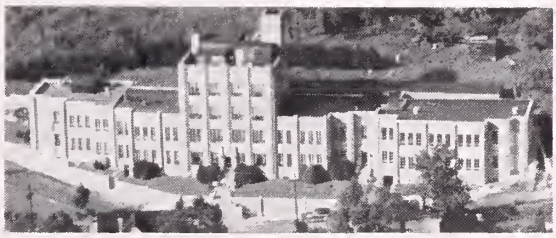

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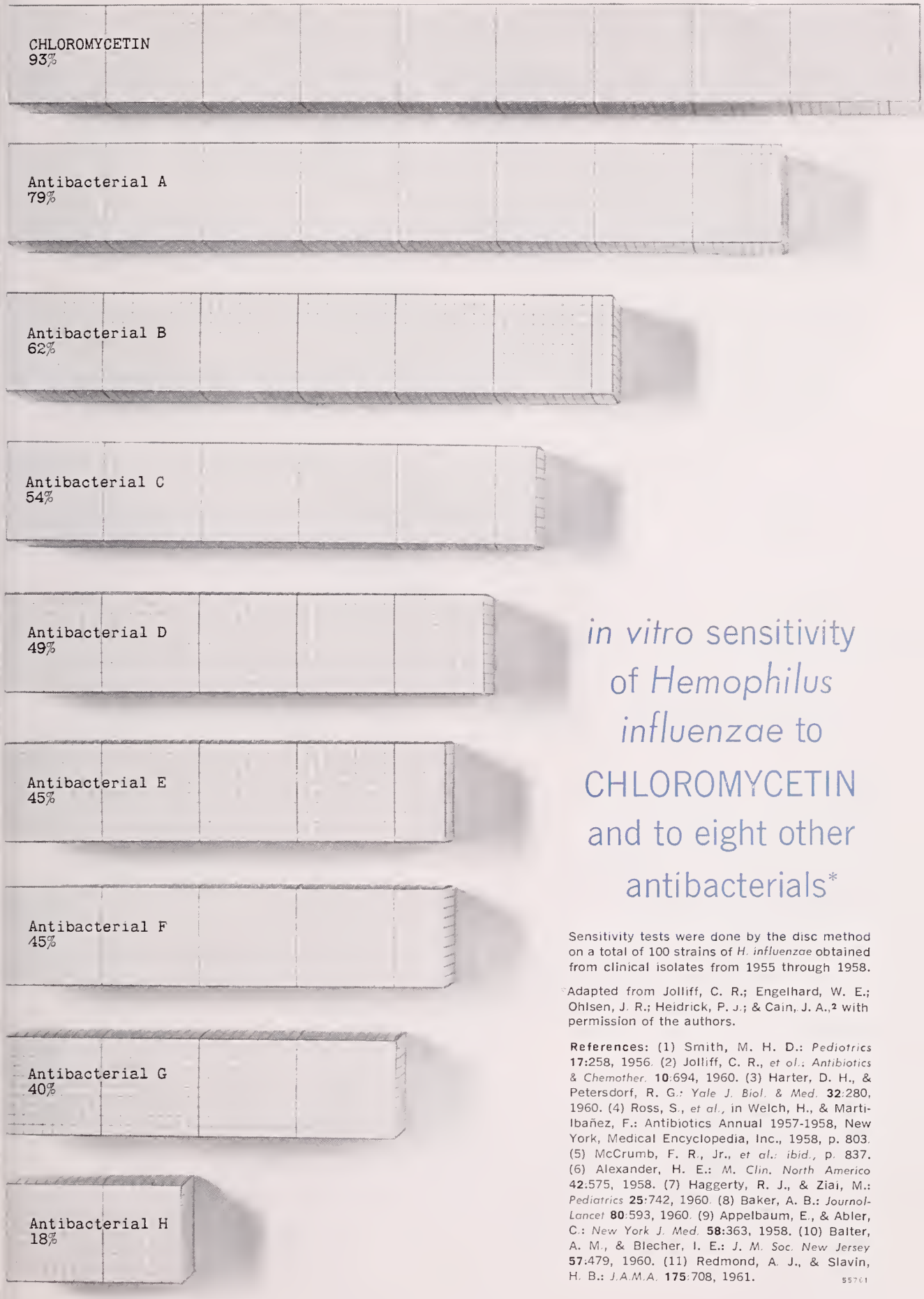

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*Adapted from Jolliff, C. R.; Engelhard, W. E.; Ohlsen, J. R.; Heidrick, P. J.; & Cain, J. A.,[2] with permission of the authors.

References: (1) Smith, M. H. D.: *Pediatrics* **17**:258, 1956. (2) Jolliff, C. R., *et al.*: *Antibiotics & Chemother.* **10**:694, 1960. (3) Harter, D. H., & Petersdorf, R. G.: *Yale J. Biol. & Med.* **32**:280, 1960. (4) Ross, S., *et al.*, in Welch, H., & Marti-Ibañez, F.: Antibiotics Annual 1957-1958, New York, Medical Encyclopedia, Inc., 1958, p. 803. (5) McCrumb, F. R., Jr., *et al.*: *ibid.*, p. 837. (6) Alexander, H. E.: *M. Clin. North America* **42**:575, 1958. (7) Haggerty, R. J., & Ziai, M.: *Pediatrics* **25**:742, 1960. (8) Baker, A. B.: *Journal-Lancet* **80**:593, 1960. (9) Appelbaum, E., & Abler, C.: *New York J. Med.* **58**:363, 1958. (10) Balter, A. M., & Blecher, I. E.: *J. M. Soc. New Jersey* **57**:479, 1960. (11) Redmond, A. J., & Slavin, H. B.: *J.A.M.A.* **175**:708, 1961.

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Box 1031 Charleston 24, W. Va.

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Book Reviews

NURSING HOME ADMINISTRATION: Training materials for Administrators of Nursing, Boarding and Mental Hygiene Homes for the Aged.—By John D. Gerletti, Ed. D.; C. C. Crawford, Ph. D., and Donovan J. Perkins, M. S. Pp. 472. Published by the Attending Staff Association, "of the Rancho Los Amigos," Imperial Highway, Downey, California. 1961. Price, $6.50.

This text has long been overdue. The volume contains a most complete compendium of operation standards, a most helpful list and description of suggestions, and objective advice, all of which, if pursued diligently, will increase the status and improve the standards of our nursing homes.

The increase in number of these homes in West Virginia is but a reflection of similar growth over the entire nation. While many of the newly constructed facilities, and some of the older ones are built, staffed and operated in an adequate manner, there is yet room for improvement in many of what are now misnamed nursing homes. This increase in facilities will surely continue, just as the number of aged persons, and suggested means for their care, will surely increase in the years to come.

Of course, as much of the detail in such a publication will be only of academic interest to the physicians, its contents can be referred to those in authority in present and future nursing homes and the physician's knowledge will surely have a moral and factual influence upon many administrators.

For the builders and operators of such facilities, this book is a must, not only for study, but more so for compliance with its helpful contents.—James S. Klumpp, M. D.

* * * *

TEXTBOOK OF MEDICINE—By Various Authors and edited by Sir John Conybeare, K. B. E., M. C., D. M. (Oxon.), F. R. C. P., Consulting Physician to Guy's Hospital, London; and W. N. Mann, M. D. (Lond.), F. R. C. P., Physician to Her Majesty's Household and Physician to Guy's Hospital, London. Pp. 989, with numerous illustrations. The Williams & Wilkins Company, Baltimore 2, Maryland. 1961. Thirteenth edition. Price $10.00.

This is the thirteenth edition of a well-known medical text. It has been helpful to students and physicians for thirty years. The authors are British clinicians of high professional repute. Those physicians who are familiar with previous editions will find much that is new and many chapters completely overhauled. The book is up-to-date in its inclusion of new diseases and latest clinical, laboratory and therapeutic devices.

The front cover pages have for handy reference the normal blood, urine and cerebral spinal fluid findings.

The contents are arranged in traditional style. There are very few illustrations and a fair number of x-ray reproductions.

In the chapter on Pulmonary Tuberculosis the author places more emphasis on rest than most American

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chest specialists. He also recommends collapse therapy in the form of pneumothorax and even phrenic paralysis in some cases. He believes pneumothorax is unjustifiably unpopular today. There is little discussion of the respiratory viruses which is an active phase of investigation and clinical study in this country.

This is a large book containing a fund of information, most of which is readily available. The print is small and the page is not divided, so reading may not be too facile. Among its several reasons for recommendations is the low cost for a book of this size and content.

Many chapters will indicate minor differences in emphasis, approach and therapy from the usual procedures of American clinicians.

New Saunders Books

W. B. Saunders Company features the following recent books in their full-page advertisement appearing on page vii in this issue:

Dripps, Echenhoff and Vandam—"Introduction to Anesthesia." An ideal basic guide to the understanding and safe administration of anesthesia.

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THE MYERS CLINIC

Philippi, West Virginia

Correspondence

September 1, 1961

Dr. Walter E. Vest, Editor
The West Virginia Medical Journal
Huntington, West Virginia

Dear Doctor Vest:

During the recent annual meeting of our Association the writer was appraised of several critical items, alleged to exist in our present MAA program. The Committee on Medical Economics desires and intends to do everything possible to correct any inequities in the program, whether they be directed to or caused by the members of the medical profession. Let me state the alleged faults (and I use the word alleged in the absence of documentation) in order that our members who did not attend the annual meeting will be aware of the situation.

Several physicians reported that patients of apparent means, who for years had been treated as private patients with prompt payment of the usual fees, had reported to them with fiscal eligibility certificates, often after they had been accepted as private patients. In some instances these events were a disturbing factor in the economic conditions of some physicians, perhaps more so among those in rural practice.

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It was reported that some physicians have considered, or actually have demanded a fee over and above that stated in the schedule, in those cases where the patient and/or his relatives had demanded additional services, or were willing to pay such additional fees. Some patients have complained to the Director of Welfare regarding these alleged extra charges. It should be stated that paragraph one of the MAA regulations definitely states that acceptance of these older citizens as patients under the MAA fee schedule obligates the physician to accept such fee in full for services rendered. Your Committee disapproved of any move which would give to any physician the responsibility or privilege of making a final determination of fiscal status of any patient he treated, and a proposed resolution to that effect was not cleared by the Resolutions Committee.

There were other complaints voiced which will receive Committee attention. It is hoped that every member will read the following sentence carefully and abide by its contents. If any member, any group of members, or any component society has any valid complaints regarding the operation of the MAA program, please report the matter to the Chairman at the address below, with *documentation* of any alleged violations or misuse by any person. Do not complain directly to the Welfare Department. Your Committee is willing to serve the best interest of all parties concerned, but we cannot validate any complaint without documentation.

Sincerely yours,

(Signed) James S. Klumpp, M. D.
Chairman
Medical Economics Committee
2255 Cherry Avenue
Huntington, West Virginia

A Popular Sport

Castigation of AMA has become a popular sport. First it is said that AMA is always against everything, never for anything. Nothing could be further from the truth but the critics do not wish to listen. Then they condemn when positive action is taken. Latest attack came via a *New York Times* News Service release early this month. The story was based on an article in *The Christian Century* about the General Assembly of the United Presbyterian Church at Buffalo, New York, in May.

The magazine seems to have been put out because the Presbyterian group did not endorse the Kennedy Administration's efforts to put medical care of the elderly under Social Security. The magazine seemed to think delegates had declined to support the proposed legislation because of "misuse of truth" and lack of "courtesy and manners" by AMA. Ire was aroused because delegates to the Assembly had been given information enabling them to understand both sides of the question. Presbyterians denied that there had been any pressure brought to bear. Apparently it is meritorious to work for socialism but a sin to be opposed to it. This is typical of the castigation currently being applied to AMA.—H. L. H., in Northwest Medicine.

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1961

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WVU Medical Center
—News—

Dr. John W. Nelson has accepted appointment as Assistant Professor and Chairman of the Department of Neurology at the West Virginia University School of Medicine. The appointment was announced last month by Acting University President Clyde L. Colson.

Doctor Nelson, a native of Hagerstown, Indiana, formerly served as clinical director of the State Hospital at New Castle, Indiana. He had previously served two years as a member of the faculty of the Department of Neurology at the University of Tennessee School of Medicine.

He received his M. D. degree from the Indiana University School of Medicine and served an internship at Marion County General Hospital in Indianapolis. He served a residency in Clinical Neurology at the Indiana University Medical Center.

Doctor Nelson is certified by the American Board of Psychiatry and Neurology and is a member of the American Academy of Neurology, the Marion County Medical Society, Indiana State Medical Association and the American Medical Association.

Personal Injury Demonstration Trial

Physicians and lawyers have been invited to attend a personal injury demonstration trial which will be held in the Medical Center Auditorium on November 6.

Judge Frank Haymond of the State Supreme Court of Appeals will preside and the moderator will be William O. Morris, professor of law at the University.

Representing the plaintiff will be Attorneys John J. Lane and Stanley Preiser, both of Charleston, and Kingsley Smith of Clarksburg and William O'Farrell of Charleston will represent the defendant.

Professor Morris said that several orthopedic surgeons in the Morgantown area would present testimony.

Research Grants

The School of Medicine has received a research grant of almost $100,000 from the National Institutes of Health to support a five-year study aimed at producing more basic knowledge about kidney functions.

The study will be conducted by Dr. Herbert E. Warden, Associate Professor of Surgery, and Dr. Bernard Zimmermann, Professor and Chairman of the Department of Surgery.

The grant calls for $19,485 for 1961-62, and $19,369 for each of the four subsequent years, making a total of $96,961. The money will be used to buy laboratory equipment and supplies, employ technicians, and develop certain specialized testing procedures.

• Compiled from moteriol furnished by Cletis Pride, Public Informotion Officer, West Virginia University Medicol Center, Morgontown, W. Va.

The National Institutes of Health also awarded a $35,000 grant to the School of Medicine for a research project entitled "Functional Pathology in Ventricular Septal Defect."

Dr. Russell V. Lucas, Assistant Professor of Pediatrics, and Dr. Herbert E. Warden, Associate Professor of Surgery, are working on the study of the congenital heart condition which affects about 1 in every 200 babies.

Dr. Edmund B. Flink, Professor and Chairman of the Department of Medicine, has been awarded a $18,975 research grant to continue his investigation of "The Role of Magnesium in Human Nutrition" during the coming year. The grant is a renewal of one held last year by Doctor Flink.

Doctor Flink is being aided in the research by Dr. John E. Jones, a United States Public Health Service trainee in metabolic diseases; and two medical students, Charles E. Turner of Huntington and Jesse F. Griffith of Charleston.

A $39,335 research grant has been awarded to Dr. Charles E. Andrews, Associate Professor of Medicine, to support a study of "Lung Function and Respiratory Center Sensitivity in Obesity."

Doctor Andrews said that the grant will be used primarily to buy laboratory equipment needed to study the breathing habits of obese people. The project will be carried on as a part of the University's cardiopulmonary disease program.

Dr. Don H. Blount, Assistant Professor of Physiology, has been awarded a $6,900 grant to support a heart research project during the coming year. Another $6,900 has been approved to support the investigations in 1962-63.

The University physiologist is making a study of the energy reserves of the heart under conditions of increased work loads with the goal of furthering knowledge of how that organ reacts to emergency situations.

He said the NIH grant will be used to buy supplies and equipment and to employ technical assistants.

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The Month in Washington

• From the Washington Office of the American Medical Association.

THE American Medical Association and the federal government declared all-out war on medical quacks and charlatans who bilk the sick and gullible of hundreds of millions of dollars each year through useless gadgets, phony nostrums, fake reducing pills and the many other gimmicks of the medicine show trade.

The campaign was launched at the First National Congress on Medical Quackery, under joint sponsorship of the AMA and the U.S. Food and Drug Administration, which was held at the Sheraton-Park Hotel in Washington, October 6-7.

Among the keynote speakers were two top officials in President John Kennedy's cabinet, Abraham A. Ribicoff, Secretary of Health, Education and Welfare, and Postmaster General J. Edward Day. Leonard W. Larson, M. D., president of the AMA, and Oliver Field, Director of the AMA Department of Investigation, spoke for organized medicine.

Others on the program included Herbert J. Miller, Assistant U. S. Attorney General in charge of the criminal division; George P. Larrick, Commissioner of the FDA, and Paul Rand Dixon, Chairman of the Federal Trade Commission. Other speakers included representatives of the American Cancer Society, the Arthritis and Rheumatism Foundation, and the National Better Business Bureau.

C. Joseph Stetler, Director of the AMA Legal and Socio-Economic Division, presided at the meeting.

Campaign Against Quacks

Many state and county medical societies from throughout the nation sent representatives to the Congress. They carried back to their societies plans for cooperation with enforcement agencies at the local level and for a step-up of public education on the subject in an accelerated campaign against quacks.

Highlights of the talks included:

Doctor Larson: "We must educate the public thoroughly and effectively. We must wage psychological as well as scientific warfare. We must not only prove the worthlessness of quackery, but we also must establish confidence in sound medical and health care.

"Speaking for the American Medical Association and our 180,000 physician-members, I pledge our efforts to the final eradication of quackery and all its minions and satraps."

Secretary Ribicoff: "The total cost of unnecessary or dangerous medications in this country probably exceeds $1 billion each year. Much of this expense is to men, women, and children who dearly need this money for good medical care or for other necessities of life.

"But quackery's cost in dollars only introduces the story. In terms of false hopes raised, in terms of ugly delusions fostered, in terms of tinkering with human life itself, the cost cannot be measured. The quack flirts with disaster. He challenges the sixth Commandment: 'Thou shalt not kill.'"

'Mythology' of Nutrition

Mr. Larrick: "The most widespread and expensive type of quackery in the United States today is in the promotion of vitamin products, special dietary foods, and food supplements. Millions of consumers are being misled concerning their need for such products. Complicating this problem is a vast and growing 'folklore' or 'mythology' of nutrition which is being built up by pseudo-scientific literature in books, pamphlets, and periodicals. As a result, millions of people are attempting self-medication for imaginary and real illnesses with a multitude of more or less irrational food items. Food quackery today can only be compared to the patent medicine craze which reached its height in the last century. Especially disturbing is the tendency shown by some big and hitherto respected food concerns to use quackery in their sales material."

Mr. Dixon: "Properly drafted and administered, legislation giving the Federal Trade Commission power to issue temporary cease-and-desist orders would, while observing all the requirements of due process, make it possible to protect the public interest more adequately in many areas.

"Although in the case of food, drug, and cosmetic advertising, the Commission can . . . apply to district courts for temporary injunctions, it would be much more efficient for the Commission itself to issue temporary orders in those cases as well as in others."

Peddling of Fake Medical Cures

Mr. Day: "The peddling of fake medical cures is the most prominent fraudulent activity conducted through the U. S. mails today. This huge 'industry'—and it has grown to that extent—is so prevalent and so widespread that it taxes the manpower of the Postal Inspection Service to the utmost in trying to bring the perpetrators to justice.

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Obituaries

LOAMI L. AULTZ, M. D.

Dr. Loami L. Aultz, 90, of Huntington, died on September 28 at a hospital in that city.

Doctor Aultz, who practiced medicine for more than 60 years in Lincoln, Logan and Kanawha counties prior to his retirement in 1958, was born at Charleston on February 1, 1871, son of the late Francis M. and Agnes Young Aultz.

He received his M. D. degree from the University of Louisville College of Medicine in 1894 and was licensed to practice in West Virginia that same year. He had postgraduate training at hospitals in Philadelphia and Baltimore.

He was an honorary life member of the Logan County Medical Society, the West Virginia State Medical Association and the American Medical Association.

Besides his widow, he is survived by a son, James M. Aultz of Huntington; two sisters, Mrs. Lillie Dawson and Mrs. Ora Young, both of Charleston; and a brother, Lannis Aultz of Charleston.

* * * *

GEORGE WASHINGTON WYATT, M. D.

Dr. George Washington Wyatt, 86, of Dryfork, Randolph County, died on October 2 at his home in that community following a long illness.

Doctor Wyatt, who practiced medicine for more than fifty years in Dryfork, was born there on July 6, 1875. He was graduated from Fairmont State Normal in 1902, and received his M. D. degree from the University of Louisville School of Medicine in 1907. He was licensed to practice in West Virginia that same year.

He was an honorary life member of the Barbour-Randolph-Tucker Medical Society, the West Virginia State Medical Association and the American Medical Association.

He is survived by one daughter, Mrs. Katherine Cooper; and four sons, George W., Jr., and Edward F., both of Dryfork; Howard K. of Galveston, Texas; and Milton L. of Clarksburg; a sister, Miss M. H. Wyatt of Felton, California; and a brother, E. E. Wyatt of Cortland, New York.

Medical Testimony

Doctors should not resent being cross-examined by the opponent of the lawyer who calls him as a witness. Medical science is not an exact science and opinions differ among members of the medical profession just as they do in others. When a doctor gives an opinion or states a conclusion, the opposing side has right to question the validity of each opinion or conclusion, to put it to the same testing that the opinions of other expert witnesses are subjected. In each days activities we are all at one time or another cross-examiner or cross-examined. There is no reason for a witness, lay or expert, to fear cross-examination unless he fears expressing the truth under oath and in public—Journal, Medical Association of Georgia.

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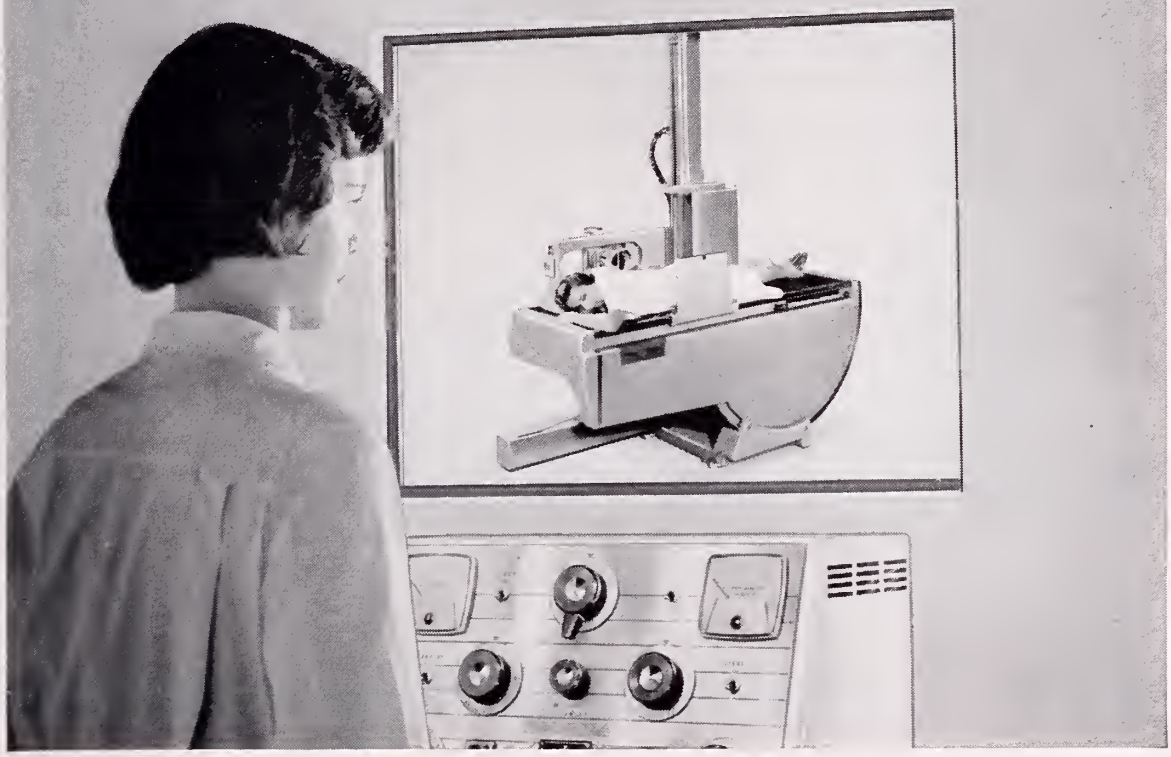

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County Societies

CENTRAL WEST VIRGINIA

Dr. Elden H. Pertz of Weston was elected president of the Central West Virginia Medical Society at a meeting held in Buckhannon on September 21. He succeeds Dr. Harold D. Almond of Buckhannon.

Other new officers are as follows: Dr. W. W. Huffman, Gassaway, vice president; and Dr. Robert L. Chamberlain, Buckhannon, secretary-treasurer (re-elected).

Dr. D. E. Greeneltch of Wheeling, President of the West Virginia State Medical Association, was the guest speaker and he discussed pending legislation on the state and national levels.

Mrs. Harold Almond presided at a meeting of the Woman's Auxiliary which was held that same evening. The guest speaker was Miss George Rast, Director of the Department of Nursing, West Virginia Wesleyan College.

Dr. Ira F. Hartman was in charge of arrangements for the dinner meeting which was attended by more than 35 physicians, their wives and guests.—R. L. Chamberlain, M. D., Secretary.

* * * *

McDOWELL

The regular monthly meeting of the McDowell County Medical Society was held at Grace Hospital in Welch on October 11. Dr. Louis A. Vega, the president, presided at the meeting which was attended by 24 members and guests.

The guest speaker was Dr. J. B. Taylor of Bluefield, who presented a paper on "The Use of Oral Drugs in the Treatment of Diabetes." A question and answer period followed the formal presentation.

During the business meeting, Doctor Vega named Drs. Ray E. Burger, Dante Castradale and A. A. Carr as members of the nominating committee for the coming year.—George L. Fischer, M. D., Secretary.

* * * *

MERCER

Dr. John A. B. Holt of Charleston was the guest speaker at the regular monthly meeting of the Mercer County Medical Society which was held at the University Club in Bluefield on September 18.

Doctor Holt, who is chairman of the State Medical Association's Committee on Medical Emergencies and Civil Defense, gave an interesting talk on "Operation MoHar," a full-scale disaster exercise which was held in Charleston last April. He also showed color slides and emphasized that adequate preparation for civil defense is imperative.

Dr. N. Allen Dyer, Mercer County health officer, discussed the flu epidemic which is expected this fall and winter by the United States Public Health Service. He also reported on the Hypertension Clinic and said that 500 persons had been screened and that 220 had elevated diastolic pressures.

Dr. Henry F. Warden, Jr., the president, presided at the meeting which was attended by 36 members.—John J. Mahood, M. D., Secretary.

OFFICERS OF COMPONENT SOCIETIES

Society	President		Secretary		Meetings
Barbour-Randolph-Tucker	John L. Rittmeyer	Philippi	Charles L. Leonard	Elkins	3rd Thurs.
Boone	W. L. Barbour	Whitesville	H. H. Howell	Madison	2nd Wed.
Brooke	James E. Wise	Follansbee	H. L. Hegner	Wellsburg	
Cabell	C. Stafford Cloy	Huntington	W. L. Neal	Huntington	2nd Thurs.
Central West Virginia	Harold D. Almond	Buckhannon	R. L. Chamberlain	Buckhannon	As Scheduled
Eastern Panhandle	Jules F. Langlet	Charles Town	F. A. Hamilton, Jr.	Martinsburg	2nd Wed.
Fayette	W. P. Bittinger	Summerlee	Ivan H. Bush, Jr.	Oak Hill	1st Wed.
Greenbrier Valley	Eugene McClung	Lewisburg	E. L. Crumpacker	White Sul. Spgs.	2nd Wed.
Hancock	E. M. Clubb, Jr.	Weirton	Edward A. Gretchen	Weirtan	2nd Tues
Harrison	Harry T. Linger	Bridgeport	A. Robert Marks	Clarksburg	1st Thurs.
Kanawha	William B. Rossman	Charleston	A. B. Curry Ellison	Charleston	2nd Tues.
Logan	Henry Babroff	Man	Charles K. Rath	Logan	2nd Wed.
Marion	F. W. Mallamo	Fairmont	G. Thomas Evans	Fairmont	Last Tues.
Marshall	H. B. Ashworth	Moundsville	J. W. Myers	Moundsville	Semi-Ann.
Mason	Lewis D. Telle	Pt. Pleasant	Don Glossman	Pt. Pleasant	Bi-Monthly
McDowell	Louis Vega	Welch	George L. Fischer	Welch	2nd Wed
Mercer	Henry F. Warden, Jr.	Bluefield	John J. Mahood	Bluefield	3rd Mon.
Mingo	A. H. Henderson	Williamson	Robert J. Tchou	Williamson	2nd Wed.
Monongalia	R. J. Nottingham	Morgantown	C. C. Romine	Morgantown	1st Tues.
Ohio	S. S. Bobes	Wheeling	H. G. Dickie	Wheeling	4th Tues.
Parkersburg Academy	William E. Gilmore	Parkersburg	Robert C. Lincicome	Parkersburg	1st Thurs.
Potomac Valley	H. Luke Eye	Franklin	Philip G. Staggers	Keyser	2nd Wed.
Preston	D. R. Davis	Kingwood	C. Y. Moser	Kingwood	4th Thurs.
Raleigh	Harry F. Cooper	Beckley	Thomas L. Martin	Beckley	3rd Thurs.
Summers	D. W. Ritter	Hinton	B. W. McNeer	Hinton	3rd Mon.
Taylor	Paul P. Warden	Grafton	R. D. Stout	Grafton	Last Thurs.
Wetzel	Lemoyne Coffield	New Martinsville	C. P. Watson, Jr.	New Martinsville	Monthly
Wyoming	Ward Wylie	Mullens	Mario Cardenas	Mullens	Quarterly

Recognizing that the exchange of ideas is fundamental to medical progress, Lederle continues its Symposium program with the 10th year of scheduled meetings. Through these Symposia, sponsored by medical organizations with our cooperation, over 50,000 physicians have had the opportunity to hear and question authorities on important advances in clinical medicine and surgery. You have a standing invitation to attend any of these Symposia with your wife, for whom a special program is planned.

ANOTHER YEAR OF SYMPOSIA . . .

PROVIDENCE, RHODE ISLAND
Wednesday, November 1, 1961
The Colony Motor Hotel

HARRISBURG, PENNSYLVANIA
Thursday, November 9, 1961
The Penn Harris Hotel

JACKSONVILLE, FLORIDA
Sunday, November 12, 1961
The Robert Meyer Hotel

ALLENTOWN, PENNSYLVANIA
Wednesday, November 15, 1961
The Americus Hotel

SOMERVILLE, NEW JERSEY
Thursday, November 16, 1961
The Far Hills Inn

NASHVILLE, TENNESSEE
Wednesday, November 29, 1961
Meharry Medical College

EDINBURG, TEXAS
Saturday, December 2, 1961
The Echo Motor Hotel

WACO, TEXAS
Sunday, December 10, 1961
The Holiday Inn

Plans for 1962 already include the following Symposia, with more being arranged:

MOBILE, ALABAMA
Friday, January 5, 1962
The Admiral Semmes Hotel

ST. PAUL, MINNESOTA
January 8, 1962
The Hotel Lowry

PORTLAND, OREGON
Wednesday, January 24, 1962
The Sheraton-Portland Hotel

ANCHORAGE, ALASKA
Saturday, February 24, 1962
The Westward Hotel

WINCHESTER, VIRGINIA
Wednesday, March 14, 1962
The Lee-Jackson Hotel

SIOUX CITY, IOWA
Thursday, March 15, 1962
The Sheraton-Martin Hotel

SPOKANE, WASHINGTON
Saturday, June 2, 1962
The Davenport Hotel

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Plan Now to Attend the AMA Clinical Session in Denver, November 27-30.

Woman's Auxiliary

to the

WEST VIRGINIA STATE MEDICAL ASSOCIATION

President: Mrs. Vernon L. Dyer, Petersburg
President Elect: Mrs. Howard G. Weiler, Wheeling
First Vice President: Mrs. John W. Hash, Charleston
Second Vice President: Mrs. L. Dale Simmons, Clarksburg
Third Vice President: Mrs. Earl S. Phillips, Wheeling
Fourth Vice President: Mrs. Lee F. Dodds, Huntington
Treasurer: Mrs. Andrew J. Weaver, Clarksburg
Recording Secretary: Mrs. J. A. B. Holt, Charleston
Corresponding Secretary: Mrs. Fred Moomau, Petersburg
Parliamentarian: Mrs. D. E. Greenelch, Wheeling

18TH ANNUAL MEETING IN CHICAGO

The 18th Annual Conference of State Presidents, Presidents Elect, National Officers and Chairmen of the Woman's Auxiliary to the American Medical Association was held at the Drake Hotel in Chicago, October 1-4.

Attending from West Virginia were Mrs. Vernon L. Dyer of Petersburg, President of the Woman's Auxiliary to the West Virginia State Medical Association, and Mrs. Howard G. Weiler of Wheeling, the President Elect.

Mrs. William G. Thuss of Birmingham, Alabama, President Elect of the AMA Auxiliary, presided at the four-day meeting, and the address of welcome was delivered by Dr. F. J. L. Blasingame, Executive Vice President of the AMA. The theme for the Conference was "Right Purpose, Fuller Knowledge, Thoughtful Planning and Honest Effort."

Interesting features included a skit from hearings on the King-Anderson Bill (HR 4222), which would place the medical care for the aging program under Social Security.

Speakers on the program included Dr. Leslie V. Hohman of the Duke University School of Medicine, who spoke on "Prevention and Treatment of Emotional Disturbances in Children"; and Major Mathew D. Parrish (MC), who discussed "Psychiatry for the Community in Modern Warfare." All phases of the Auxiliary program for the coming year were discussed and many new ideas presented.

Dr. George M. Fister of Ogden, Utah, President Elect of the American Medical Association, was the speaker at a luncheon meeting. He called upon Auxiliary members to become fully informed and speak as individuals rather than as a group on problems related to medicine.

Other representatives of the AMA who appeared on the program included Dr. Ernest B. Howard, Assistant Executive Vice President; Mr. Leo E. Brown, Assistant to the Executive Vice President; Mr. Keith Markee, AMA Speakers Bureau; and Mr. Robert A. Enlow, Circulation Manager of *Today's Health.*

The Conference was well attended by representatives from every state, and everyone found the meeting

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most interesting and informative.—Mrs. Howard G. Weiler, President Elect.

* * * *

HANCOCK

Mrs. Earl S. Phillips of Wheeling was the guest speaker at the regular monthly meeting of the Woman's Auxiliary to the Hancock County Medical Society which was held in Weirton on September 19.

Mrs. Phillips, who is third vice president of the State Auxiliary, gave an interesting talk and congratulated the local Auxiliary on receiving the AMEF award at the annual meeting at The Greenbrier in White Sulphur Springs. Mrs. E. M. Clubb, Jr., the president, presided at the meeting and Mrs. Leonard E. Yurko served as hostess.

A contribution was made to the Medical Library at the Weirton General Hospital, which is a project of the Auxiliary.—Mrs. Thomas G. Harper, Correspondent.

* * * *

HARRISON

The annual membership tea of the Woman's Auxiliary to the Harrison County Medical Society was held at the home of Dr. and Mrs. Donald H. Lough in Clarksburg on September 21.

Mrs. Bernard W. Wilkinson, the president, presided at the meeting and introduced Mrs. L. Dale Simmons, who was named second vice president of the State Auxiliary during the annual meeting at The Greenbrier in August, and Mrs. Andrew J. Weaver, who was named treasurer.

Mrs. Wilkinson also introduced two new members of the Auxiliary, Mrs. E. L. Linger and Mrs. Frank M. Muldoon.

Mrs. Lough was in charge of arrangements for the meeting and she was assisted by Mesdames William H. Allman, R. T. Humphries, Lynwood D. Zinn and James E. Wilson, Jr.—Mrs. J. Keith Pickens, Correspondent.

* * * *

KANAWHA

Wives of physicians serving internships and residencies at hospitals in the Charleston area were honor guests at a meeting of the Woman's Auxiliary to the Kanawha Medical Society which was held at the home of Dr. and Mrs. A. B. Curry Ellison on September 12.

The chairmen of various committees arranged displays which described the activities of their groups. Participating in the exhibit were Mesdames Thomas G. Potterfield, Kenneth G. MacDonald, Mark H. Wholey, James T. Spencer, Frederick C. Reel, Robert C. Ovington, Newman H. Newhouse, Carl J. Roncaglione, Michael Kovacevich and Joseph A. Smith.

Mrs. William R. Rice, the president, presided at the business meeting. Mrs. O. M. Harper, vice president and program chairman, announced the programs for the coming year and distributed handbooks.

Two new members, Mrs. William Ellswood and Mrs. W. F. Work, and two guests and prospective members,

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Mrs. Charles Weise and Mrs. Curtis Withrow, were introduced.

Mrs. George A. Shawkey was in charge of arrangements for the meeting.—Mrs. Paul Francke, Publicity Chairman.

* * * *

MARION

Mrs. Vernon L. Dyer of Petersburg, President of the Woman's Auxiliary to the West Virginia State Medical Association, was the guest speaker at a membership tea sponsored by the Marion County Auxiliary at the home of Dr. and Mrs. David Bressler in Fairmont on September 26.

Other state officers attending the meeting were Mrs. L. Dale Simmons of Clarksburg, second vice president; Mrs. Andrew J. Weaver of Clarksburg, treasurer; and Mrs. Fred Moomau of Petersburg, corresponding secretary.

Mrs. Dyer urged local members to increase their efforts on behalf of the American Medical Education Foundation. She announced that the state goal is set at $5,000, or $5 per member.

She also emphasized the important role of the Auxiliary in encouraging intelligent young men and women to pursue a career in medicine.

Mrs. J. J. Jenkins, Jr., the president, presided at the business meeting and Mesdames Carter F. Cort, William A. Ehrgott, Joseph D. Romino and David Bressler were in charge of arrangements.—Mrs. William T. Lawson, Correspondent.

* * * *

McDOWELL

Mrs. Vernon L. Dyer of Petersburg, President of the Woman's Auxiliary to the West Virginia State Medical Association, was the guest speaker at a meeting of the McDowell County Medical Auxiliary which was held at the home of Mrs. H. T. Schiefelbein in Welch on September 22.

Mrs. Dyer, who was installed as president during the annual meeting at The Greenbrier in August, discussed various programs which will be undertaken by the Auxiliary during the coming year. She also discussed the various ways in which a physician's wife can help in community service.

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REFERENCES

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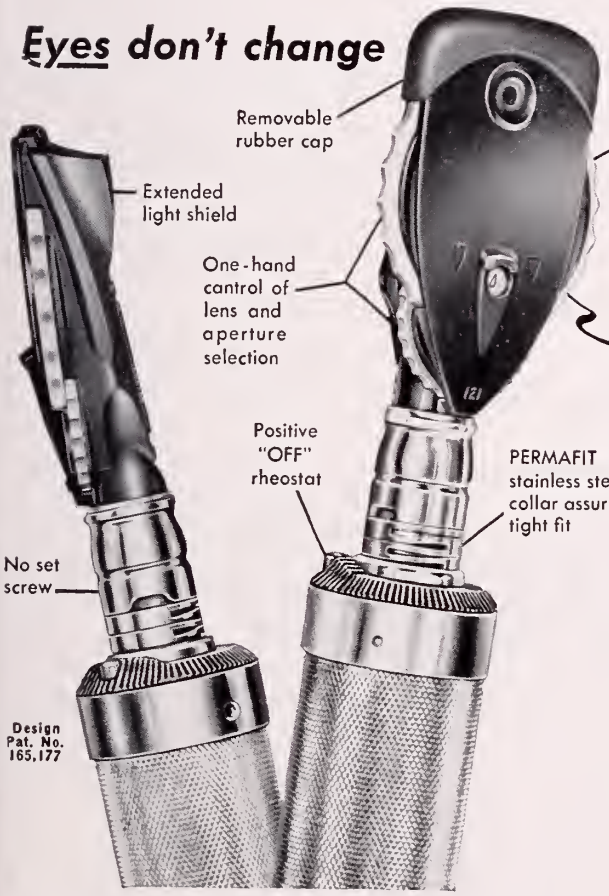

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Mrs. H. A. Bracey, the president, presided at the meeting. Plans were completed for the Crippled Children's Benefit Bridge Party which will be held in Welch on October 11.

Honor guests at the meeting were the first and second presidents of the local Auxiliary, Mrs. R. V. Shanklin of Bluefield, and Mrs. H. G. Camper of Welch. They spoke briefly on the founding (1926) and progress of the organization.—Mrs. F. L. Johnston, Secretary.

* * * *

MERCER

Mrs. W. F. Hillier, Jr., presided at the regular monthly meeting of the Woman's Auxiliary to the Mercer County Medical Society which was held in Bluefield on September 18.

Dr. Daniel Hale of Princeton, chairman of the Mercer County Board of Health, discussed the "Board of Health, Yesterday and Today." He pointed out that the Board needs the help and support from various community organizations.

Another speaker, Mrs. Cyrus Gadd, R. N., discussed the activities at the new Mercer County Health Center. She emphasized the need for voluntary workers.

Mrs. Hillier presented a report of the annual meeting at The Greenbrier in August, and yearbooks were distributed by Mrs. Robert S. Gatherum, Jr.—Mrs. James E. McGee, Jr., Correspondent.

* * * *

MONONGALIA

A coffee honoring prospective members of the Woman's Auxiliary to the Monongalia County Medical Society was held at the home of Dr. and Mrs. John H. Trotter in Morgantown on September 12. Mrs. Trotter is president of the local Auxiliary.

Mrs. Clark K. Sleeth, immediate past president of the State Auxiliary, presided at the coffee service and hostesses were Mrs. Lawrance S. Miller, chairman; and Mesdames Hubert A. Shaffer, E. F. Heiskell, Jr., J. J. Lawless and Herman A. Rich.

More than 50 members and guests attended the coffee.—Mrs. William E. King, Corresponding Secretary.

* * * *

RALEIGH

Mrs. Vernon L. Dyer of Petersburg was the guest speaker at the regular monthly meeting of the Woman's Auxiliary to the Raleigh County Medical Society which was held at the home of Dr. and Mrs. John E. McKenzie in Beckley on September 18.

Mrs. Dyer, who is president of the State Auxiliary, said that the primary activities of the Auxiliary during the coming year will be centered around civil defense and community service. She also urged Auxiliary members to give their wholehearted support to the American Medical Education Foundation.

Mrs. Harry F. Cooper, the president, presided at the meeting and she introduced three new members of the Auxiliary, Mesdames Thomas K. Mahan, Harold E. Harvey, and John W. English.—Mrs. F. L. Banks, Correspondent.

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Book Reviews

FAMILY FITNESS FOLIO—Rhythmic Exercises for all Ages—By Lawrence J. Frankel. Proceeds from the sale of this book are for the benefit of the Lawrence Frankel Foundation, a non-profit, charitable institution. Pp. 24. Lawrence Frankel Foundation, 106 Brooks Street, Charleston 1, W. Va. Price $1.25.

This book produced by Lawrence J. Frankel has been done very nicely. It shows the various types of exercises that can be used for stretching the back muscles and hamstring muscles, at the same time developing the abdominal muscles and flexor muscles of the hip.

Due to our assuming an erect posture we have developed a weak spot in the human race which is the low back area. This becomes particularly noticeable as we become softer with less activity in the heavy labor field. As one would expect, this becomes more marked at the age of 30 and on as we do less and less physical activity and become more and more sedentary.

The large muscles of our trunk can take care of the stress of the erect posture when they are in good condition and are powerful but, as they become weakened from lack of use, there is less and less protection for the spine and its soft structures. As a consequence, the incidence of back pain and strain has been increasing by leaps and bounds as we have permitted ourselves as a race to become less and less physically fit.

Because of this I feel that this handbook on fitness is a very worth-while book and one that could be a good guide for us all to follow in keeping ourselves physically fit as well as treating and protecting our backs. It has been pointed out in the folder that physical fitness is an essential element in our modern competitive society and that those who make a point of keeping themselves in good condition have been shown to have less physical diseases and are able to better face the problems that are brought before them.

Included also in the folder are a calorie chart and a calorie expenditure chart which are interesting to correlate with the exercise training. This book would be a fine addition to anyone's library and would be much better were it very carefully made use of.—H. M. Hills, Jr., M. D.

* * * *

THE CENTURY OF THE SURGEON—A description of surgical progress in the last 100 years, by Jurgen Thorwald. Pp. 432. Pantheon Books, 333 Sixth Avenue, New York 14, New York. Price $5.95.

I cannot repeat the oft-used statement that, once started, the reader will not put the book aside until reading is completed because of two simple reasons, i. e., the contents are too interesting to allow scanning, and the text is too lengthy to complete in one sitting. It is practically certain, however, that once started, every man of medicine and the majority of well-read

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laymen will be entranced and keenly interested in the story of the remarkable advances in surgery during the past century.

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The descriptive material is vivid, the research was thorough, and the published result is a must for every physician.—James S. Klumpp, M. D.

Books Received

THE CERVIX UTERI AND ITS DISEASES—By C. Frederic Fluhmann, B. A., M. D., C. M., Chief of Obstetrics & Gynecology, Presbyterian Medical Center, San Francisco, California and Clinical Professor of Obstetrics & Gynecology, Stanford University School of Medicine, Palo Alto, California. Pp. 556, with numerous illustrations. Philadelphia and London: W. B. Saunders Company. 1961. Price $14.00.

* * * *

IMMUNITY—By Sidney Raffel, Sc. D., M. D., Professor, Department of Medical Microbiology, Stanford University School of Medicine. Pp. 672, with numerous illustrations. Appleton-Century-Crofts, Inc., 34 West 33rd Street, New York 1, N. Y. 1961. Second Edition. Price $10.00.

Radiology:
KARL J. MYERS, M. D.

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Correspondence

26 September 1961

Mr. William H. Lively
Executive Secretary
West Virginia State Medical Association
Post Office Box 1031
Charleston 24, West Virginia

Dear Mr. Lively:

The retention of certain servicemen beyond their normal date of expiration of active duty tours is essential in order that the augmentation of the Uniformed Services, called for by the President, can be attained. Implementation poses many problems. Among them is the valid identification of the extendees' dependents who will remain eligible for certain benefits while their sponsors remain on active duty.

The extension of tours of duty may result in some dependents being without a valid Identification Card for some time. The basis of identification of dependents is, as you know, the Uniform Services Identification and Privilege Card (DD Form 1173). Each card carries an expiration date of eligibility. This date, in the case of dependents of noncareer personnel, is the same as the expected expiration date of the sponsor's tour of active duty.

In the past, the "expiration date" on the ID Card has been the governing factor in determining that eligibility still exists. Since the involuntary extension of the tours of duty of many servicemen is effective almost immediately, the probability exists that some still-eligible dependent wives and children may apply for civilian medical care to which they are still entitled. They may not, however, have in their possession the required proof of their eligibility.

No change is contemplated in the provisions of our contract which states that claims may not be processed for payment until the dependents have proven their eligibility to receive care. Service personnel are being advised that it is their responsibility to take necessary action to "up-date" the evidence of dependents eligibility.

It is most probable, however, that some dependents will be in need of authorized medical care from civilian sources prior to the time this action has been completed. In such cases, the dependent has been instructed to explain the situation to the physician and hospital authorities. They have been advised to present, if available, some tangible evidence such as allotment checks, official orders, directives, or personal letters which state the pertinent facts to the physician or hospital to help support the dependent's claim of continued eligibility.

This office is not empowered to broaden the "good faith" aspect of our contract. The number of dependents temporarily "unidentified" who require medical benefits will not be large.

In view of the situation at hand, I would appreciate your assistance in encouraging physicians and hospitals to exercise patience and understanding during the next several months when their services are requested by dependents of these extendees.

I must emphasize, however, that no claims may be processed for payment unless the dependent has provided a valid DD form 1173 or a statement of eligibility as required by our contract and as outlined in ODMC Letter No. 1-60.

This information is being furnished to all contractors and to the editors of leading medical and hospital journals. We would appreciate it if you could publish a copy of this letter, or an extract of the information in the next copy of your Medical Society Journal or any other news media which is circulated to your membership.

Sincerely,

(Signed) W. D. GRAHAM
Brigadier General, MC, USA
Executive Director

A golfing minister had been beaten badly by an elderly member of his congregation. He returned to the clubhouse rather disgruntled. "Cheer up," his opponent said "Remember, you will win at the finish; you'll probably bury me some day." "Yeah," growled the preacher, "but even then it will be your hole."

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FOR SALE—Physician retiring and desires to sell office equipment. Write GWN, The West Virginia Medical Journal, Box 1031, Charleston 24, W. Va.

WANTED—Otolaryngologist. Board certified or eligible. Partnership after one year. Salary open. Write Harold Brown, The Gallipolis Clinic, Gallipolis, Ohio.

SITUATION WANTED—Orthopedic surgeon desires to relocate in a partnership or solo practice, preferably in a community of 50.000 or larger. Board eligible and military obligation fulfilled. For particulars write TJE. The West Virginia Medical Journal, Box 1031, Charleston 24, W. Va.

WANTED—General practitioner, between the ages of 40 and 50. Salary dependent on personal qualifications and ranges from $6,995 to $12,210 per year. Write J. F. Heavey, Chief, Personnel Division, VA Hospital, University Drive, Pittsburgh 40, Pa.

WANTED—General practitioner and internist. Twenty man general practice and specialty group in Taconite area of northern Minnesota. Heavy industrial. New hospital facility completed in 1960. Unusually liberal partnership agreement. Starting salary up to $1200. Excellent hunting, fishing, skiing area. Write A. G. Farley, East Range Clinic, Virginia, Minnesota.

AVAILABLE—Position of Physician to act as admitting physician, active 196-bed GM&S hospital. Salary dependent on qualifications; citizen. Many fringe benefits. Write Manager, Veterans Administration Hospital, Beckley, West Virginia.

PEDIATRICIAN WANTED—Well-established Ohio Clinic group. Fine facilities. Early partnership. Address: Manager, Box 240, Gallipolis, Ohio.

WANTED—Young physician for training and career in industrial medicine. A large chemical company outstanding in its field. Please send as soon as possible resume with letter, giving name, address, phone number, age, training, medical education and licensure, plus a recent photograph. Address, P. O. Box 993, Charleston, West Virginia.

WANTED—Physician for general practice. Good opening. Associated with internist and surgeon. Write EKW, West Virginia Medical Journal, Box 1031, Charleston 24, W. Va.

WANTED—Radiologist for new 150-bed hospital with well equipped department. Write PW, Box 1031, Charleston 24, West Virginia.

WANTED—House physician for GP duty in general hospital (125 beds). No exchange students. Foreign graduates with immigrant visa and fluent English, $500 monthly and single maintenance. Write Kenneth N. Byrne, M. D., Superintendent, Emergency Hospital, Welch, West Virginia

WANTED—Physician to serve as chief of outpatient clinic in a 200-bed general medical and surgical hospital affiliated with the WVU School of Medicine. Salary dependent on qualifications. Many fringe benefits. Apply to Hospital Director, VA Hospital, Clarksburg, West Virginia.

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Roentgenology:
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Lester L. Cline, Ass't. Bus. Mgr.

DECEMBER
1961

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Box 1031 Charleston 24, W. Va.

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The Weeders, Van Gogh, Bernard Koehler Collection, Berlin

STRAIN

Essential in moving external masses, but potentially dangerous in moving the bowels, since vascular accidents may be precipitated in heart patients by excessive straining at stool. For cardiac patients with constipation, Metamucil adds a soft, bland bulk to the bowel contents to stimulate normal peristalsis and also to hold water within stools to keep them soft and easy to pass. Thus Metamucil, with an adequate water intake, induces natural elimination with a minimum of straining. Metamucil also promotes regularity through "smoothage" in all types of constipation.

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SEARLE

WVU Medical Center
—News—

A survey team from the Association of American Medical Colleges and the American Medical Association visited the West Virginia University School of Medicine late in October to evaluate the School and its programs of medical education with a view to recommending full accreditation.

Dean Clark K. Sleeth said the accrediting survey was made because the School of Medicine has a fourth year class for the first time in its history. It is currently accredited as a two-year institution.

Members of the survey team which visited the WVU School of Medicine are shown above. Seated, left to right, Dr. A. N. Taylor and Dr. Vernon W. Lippard. Standing, left to right, Dr. Gerard-Ludger Larouche, Dr. George T. Harrell and Dr. Winston K. Shorey.

The survey team concerned itself with curriculum, teaching methods, staff and facilities. Service, research and graduate training were considered primarily because of their importance in the undergraduate medical student program.

Members of the survey team were Dean George T. Harrell of the University of Florida College of Medicine and Dean Winston K. Shorey of the University of Arkansas School of Medicine, representing the Association of American Medical Colleges; and Dean Vernon W. Lippard of the Yale University School of Medicine and Dr. Anthony N. Taylor, representing the American Medical Association's Council on Medical Education and Hospitals.

Dr. Gerard-Ludger Larouche, Dean of the Faculty of Medicine of the Universite de Sherbrooke, Quebec, Canada, accompanied the team as an observer.

• Compiled from material furnished by Cletis Pride, Public Information Officer, West Virginia University Medical Center, Morgantown, W. Va.

Nursing School Visiting Committee Named

Mrs. Thomas L. Harris of Parkersburg has been named chairman of a new visiting committee for the West Virginia University School of Nursing, according to a recent announcement by Acting University President Clyde L. Colson. The Committee will serve in an advisory capacity to Dean Dorothy M. Major and her faculty.

Other members, all of whom will serve through June 30, 1963, are Mrs. Glenice Cather of Grafton, Mrs. J. C. Huffman of Buckhannon, Mrs. William R. Laird of Montgomery and Mrs. Victor Shaw of Fairmont.

E. J. Van Liere Loan Fund

The West Virginia University School of Medicine Alumni Association recently presented a gift of $1,000 to the E. J. Van Liere Loan Fund. The gift raises the amount given to the Fund to $11,795.

The Fund is named for Dr. E. J. Van Liere, Professor of Physiology, who served as Dean of the School of Medicine until his retirement in 1960. Its purpose is to provide financial assistance in the form of long-term loans to deserving medical students.

Benedum Foundation Scholarships

Six medical students are attending the University this year with the support of Claude Worthington Benedum Foundation scholarships.

Recipients of the grants, valued at $200 each, are Gary D. Bliffen of Monaville (Logan County), John T. Fuscaldo of Fairmont, Lewis M. Judy of Romney, Charles L. Ladwig, Jr., of Clarksburg, Thomas E. Richardson of Lewisburg, and David L. White of Bridgeport.

The scholarships were named in memory of the son of the late M. L. Benedum, native of Bridgeport and internationally known oil pioneer.

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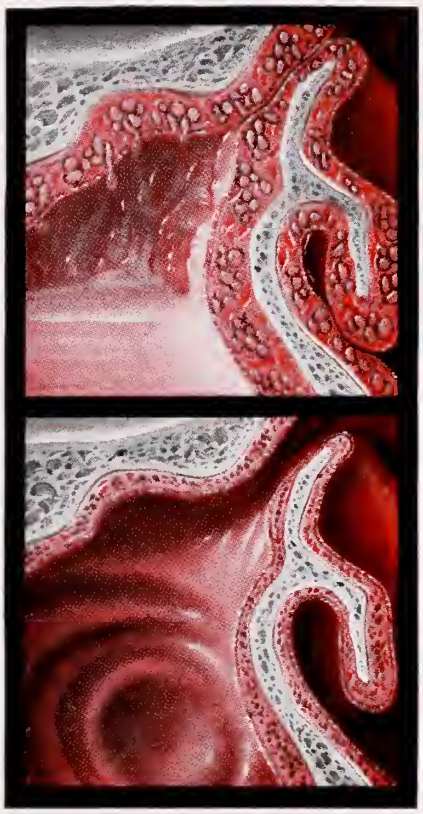

The clogged sinus
In sinusitis, the mucous membrane becomes hyperemic and edematous, lymph glands and goblet cells hyperactive. Ostium is closed by edema and secretions cannot drain freely.

The normal sinus
Magnified anatomy of a portion of maxillary sinus showing mucous membrane with cilia and lymph glands. Ostium is normal and patent.

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1. Grant, L. E.: Coryza and nasal sinus infections, **Clin. Med. & Surg.** 42:121, March, 1935. 2. Putney, F. J.: Sinus infection, in Conn, H. F. (Ed.): Current Therapy 1952, Philadelphia, W. B. Saunders Company, 1952, p. 110. 3. Simonton, K. M.: Current treatment of sinusitis, **Journal-Lancet** 79:535, Dec., 1959.

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The Month in Washington

• From the Washington Office of the American Medical Association.

THE Public Health Service said that radioactive fallout levels resulting in the United States up until early November from the new series of Soviet nuclear explosions "do not warrant undue public concern" nor initiation of any special public health action.

The federal agency said that the prevailing levels were not high enough for the public to be concerned about the safety of milk and other foodstuffs. But the PHS added that "continuous, intensive surveillance" by federal, state and local governments was justified.

In a special statement issued after a two-day conference of government and private radiation experts, the PHS pointed out that "very little is known about the effects on animals or humans of very low but prolonged exposures" from either natural background radiation or fallout from nuclear tests.

'Non-Threshhold' Concept

"The concensus of scientific opinion is that the most prudent course is to assume there is no level of radiation exposure below which one can be absolutely certain that harmful effects may not occur to at least a few individuals when sufficiently large numbers of people are involved," the PHS said. "This is known as the 'non-threshold' concept."

This concept is the basis for U.S. policies and programs for assessment of radiation hazards and for control measures designed to limit exposures of the population, the PHS said and added:

"When this non-threshold concept is applied to present radiation exposure levels being experienced in the U.S. from all sources, including fallout, the following assessment can be made.

> "The extra radiation caused by the Soviet tests will add to the risk of genetic effects in succeeding generations, and possibly to the risk of health damage to some people in the United States. It is not possible to determine how extensive these ill effects will be—nor how many people will be affected. At present radiation levels, and even at somewhat higher levels, the additional risk is slight and very few people will be affected. Nevertheless, if fallout increased substantially, or remained high for a long time, it would become far more important as a potential health hazard in this country and throughout the world.

"It is the obligation of our Federal and State governments to undertake all possible measures to assess accurately the public health significance of the present fallout situation, and to prepare for actions to safeguard the public health if these become necessary."

Federal officials said radioactive fallout on the United States will increase next February, March, April and May when the late winter and spring rains wash to earth the remainder of the fallout from the Soviet nuclear tests but it isn't expected to reach a danger level. President Kennedy said any U.S. nuclear tests in the atmosphere would be designed to hold radioactive fallout to an absolute minimum.

The PHS said that the nation's health authorities are giving careful consideration to the possible situations that might require various corrective actions.

Continuous Surveillance and Analysis

"It is evident that an important element of health protection is continuous surveillance and analysis," the PHS said.

"To achieve this, a number of Federal-State systems for public health surveillance, detailed investigation, and radiation control measure have been developed . . . In cooperation with state and local health departments, the PHS operates a nationwide early warning atmospheric radiation surveillance network currently comprised of 58 stations, and a 60-station milk radiation monitoring system. In addition, the PHS has well-established networks for general air and water pollution monitoring with a total of 343 stations. All of these include radiation monitoring among their capabilities and all are being expanded. For example, daily samples of drinking water are being collected in 12 major cities and analyzed for specific radioactive content on a weekly basis, and plans are ready for more extensive monitoring if necessary.

Sampling of Food

"The Food and Drug Administration has expanded its program of monitoring the levels of radioactive contamination in foods. Working through 18 District offices and 39 Resident Inspection Stations, its inspectors are sampling foods from all parts of the Nation; particularly those areas where the Public Health Service's air monitoring network has indicated the highest concentration of atmospheric contamination. Additionally, FDA collects samples from selected lots of food being imported into the United States.

"These samples are being analyzed for total beta activity and selected samples are further tested to determine what specific radioisotopes are present and in what amount.

Put your low-back patient back on the payroll

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YOUR CONCERN: Rapid relief from pain for your patient. Get him back to his normal activity, fast!

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Kestler reports in controlled study: *Average time for restoring patients to full activity: with Soma, 11.5 days; without Soma, 41 days.* (*J.A.M.A. Vol. 172, No. 18, April 30, 1960.*)

Soma is notably safe. Side effects are rare. Drowsiness may occur, but usually only in higher dosages. Soma is available in 350 mg. tablets. **USUAL DOSAGE:** 1 **TABLET Q.I.D.**

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Obituaries

SIMON B. CHANDLER, M. D.

Dr. Simon B. Chandler, 74, a former member of the faculty at the West Virginia University School of Medicine, died on November 1 at his home in La Mesa, California.

Doctor Chandler, who served as Head of the Department of Anatomy at the WVU School of Medicine from 1935 until his retirement in 1957, was born in Paintsville, Kentucky. He received his M. D. degree from Northwestern University School of Medicine in 1927, and taught anatomy at Loyola University School of Medicine until he joined the faculty at the University.

He conducted investigations on anatomical problems and also made studies in the history of medicine, including early phases of the practice of medicine in Morgantown and its vicinity. He was a member of the Committee on Admissions and Scholarship of the School of Medicine and served as chairman of the Library Committee.

Besides his widow, he is survived by a daughter, Mrs. John S. McKee of San Diego, California, a former student at the WVU School of Medicine.

HUGH DUNCAN McPHERSON, M. D.

Dr. Hugh Duncan McPherson, 76, of Ravenswood, died on October 23 at a hospital in Charleston following a short illness.

Doctor McPherson served as physician for the Traux-Traer and Wyatt Coal Company on Cabin Creek for 35 years. He also was physician and surgeon for the Chesapeake and Ohio Railroad and later served in a similar capacity for Semet-Solvay Harewood Mine near Montgomery. He served as a relief physician in the coal fields following his retirement from active practice several years ago.

Doctor McPherson was a native of Fort Deposit, Alabama, and was graduated from Hamur Hall College. He attended the Tulane University School of Medicine and received his M. D. degree from the University of Louisville School of Medicine in 1912.

He was an honorary life member of the Kanawha Medical Society, West Virginia State Medical Association and American Medical Association.

He is survived by a son, Hugh D. McPherson, Jr., of Charleston; three sisters, Mrs. Ed Farrior of Union Springs, Alabama, Mrs. A. L. Askew of Midland City, Alabama, and Mrs. J. B. Tucker of Montgomery, Alabama; and a brother, Malcolm T. McPherson of Montgomery, Alabama.

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Raleigh	Mrs. Harry F. Cooper	Beckley	Mrs. F. L. Banks	Beckley
Summers	Mrs. C. L. Howard	Lewisburg	Mrs. D. W. Ritter	Hinton
Taylor	Mrs. Herbert N. Shanes	Grafton	Mrs. Paul P. Warden	Grafton
Wood	Mrs. George Gevas	Parkersburg	Mrs. Robert McDougal	Parkersburg
Wyoming	Mrs. R. C. Hatfield	Oceana	Mrs. Ward Wylie	Mullens

LISKIE JAY MOORE, M. D.

Dr. Liskie Jay Moore, 60, of Huntington, died instantly in a head-on automobile collision on State Route 2 two miles north of Ravenswood on October 29. His wife, Nelle, also suffered fatal injuries in the accident.

Dr and Mrs. Moore had attended the Annual Postgraduate Institute in Martinsburg during the weekend and were enroute home when the accident occurred. He was vice president of the West Virginia Chapter of the American Academy of General Practice.

Doctor Moore, who was a native of Progress, West Virginia, was born on November 3, 1900, son of the late John Henry and Ida U. Moore. He was graduated from Marshall University in 1929 and taught school for several years.

He attended the two-year School of Medicine at West Virginia University and received his M. D. degree from the Medical College of Virginia in 1938. He interned at the C & O Hospital in Huntington, 1938-39, and served a residency there, 1939-40. He was licensed to practice in West Virginia in 1939 and had practiced in Huntington since completion of his medical training.

He was a member of the Cabell County Medical Society, West Virginia State Medical Association, and American Medical Association. He was also vice president and medical director of the Appalachian Life Insurance Company.

He is survived by a son, John Scott Moore, who is stationed at Shepherd Air Force Base in Texas; and a daughter, Martha Jane Moore of Huntington.

* * * *

RICHARD OWEN O'DELL, M. D.

Dr. Richard Owen O'Dell, 77, of St. Albans, died on November 7 at his home in that city following a long illness.

Doctor O'Dell, who was born in Mt. Nebo, Nicholas County, in 1884, was graduated from Valparaiso University and received his M. D. degree from the Chicago College of Medicine and Surgery in 1917. He was licensed to practice in West Virginia in 1917 and located in South Charleston that same year. He served as a city councilman, health officer and in 1922 was elected Mayor of the city. He moved to St. Albans in 1940, following his retirement from active practice.

He was a former member of the Kanawha Medical Society, the West Virginia State Medical Association and American Medical Association.

Besides his widow, he is survived by a son; Richard O. O'Dell, Jr., of St. Albans; three daughters, Mrs. Iva Marie Cotton of Charleston, Mrs. Margaret Jean Reagan of Ashville, North Carolina, and Mrs. Wanda Lee McCune of the Canal Zone; a sister, Mrs. Mary Cox of Sweet Springs; six grandchildren and one great-grandchild.

Coca-Cola, too, has its place in a well balanced diet. As a pure, wholesome drink, it provides a bit of quick energy.. brings you back refreshed after work or play. It contributes to good health by providing a pleasurable moment's pause from the pace of a busy day.

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WILLIAM M. SHEPPE, M. D.

Dr. William M. Sheppe, 66, of Wheeling died at a hospital in that city on October 14 following a three-month illness. He had served as an Associate Editor of *The West Virginia Medical Journal* since 1940.

Doctor Sheppe, who was a native of Charlottesville, Virginia, was born on July 2, 1895, son of William H. and Willie White Sheppe. He was graduated from the University of Virginia and received his M. D. degree from the University of Virginia School of Medicine in 1921.

He served his internship and had postgraduate training at the University of Virginia Hospital. His specialty was internal medicine and he was a Fellow of the American College of Physicians.

He served a term as secretary of the Ohio County Medical Society and was also a member of the West Virginia State Medical Association and the American Medical Association.

Doctor Sheppe served with the Medical Corps of the United States Navy during both world wars. During World War II, he was stationed at the United States Naval Hospital in Quantico, Virginia, and was released in 1946 with the rank of Captain.

Besides his widow, he is survived by two sons, Dr. William M. Sheppe, Jr., of Charlottesville, Virginia, and Major Richard W. Sheppe of Santa Ana, California; and six grandchildren.

The 'Haves' and 'Have Nots'

A long time ago a noted specialist said that his secret of success as a physician was keeping the patient's head cool and his feet warm. And it is just now becoming generally known that a "hot head" and "cold feet" are enough to bring disaster to even a well man. And so it is with medicine today, so also with industry and labor.

Discontent seems to be the byword; and there are two kinds of discontent in this world: the discontent that works, and the discontent that wrings it's hands. The first gets what it wants, and the second loses what it has. There is no cure for the first but success; and there is no cure at all for the second.

Economics is fancy for the political picnic that two kinds of people attend—those who bring their lunch, and those who live for the handout. So it is with so-called medical economics.

The only worthwhile things that come to man in this life come through work. And work is usually hard and often bitter. This has always been true of mankind and will always remain so. The "have nots" would like to tear down the "haves" to their level, rather than try to build themselves up to the "haves."—Edward B. Mersch, M. D., in the Journal of the Kentucky State Medical Association.

A man who gives his children habits of industry provides for them better than by giving them a fortune.—Richard Whately.

OFFICERS OF COMPONENT SOCIETIES

Society	President		Secretary		Meetings
Barbour-Randolph-Tucker	John L. Rittmeyer	Philippi	Charles L. Leonard	Elkins	3rd Thurs.
Boone	W. L. Barbour	Whitesville	H. H. Howell	Madison	2nd Wed.
Brooke	James E. Wise	Follansbee	H. L. Hegner	Wellsburg	
Cabell	C. Stafford Clay	Huntington	W. L. Neal	Huntington	2nd Thurs.
Central West Virginia	Harold D. Almond	Buckhannon	R. L. Chamberlain	Buckhannon	As Scheduled
Eastern Panhandle	Jules F. Langlet	Charles Town	F. A. Hamilton, Jr.	Martinsburg	2nd Wed.
Fayette	W. P. Bittinger	Summerlee	Ivan H. Bush, Jr.	Oak Hill	1st Wed.
Greenbrier Valley	Eugene McClung	Lewisburg	E. L. Crumpacker	White Sul. Spgs.	2nd Wed.
Hancock	E. M. Clubb, Jr.	Weirton	Edward A. Gretchen	Weirton	2nd Tues.
Harrison	Harry T. Linger	Bridgeport	A. Robert Marks	Clarksburg	1st Thurs.
Kanawha	William B. Rossman	Charleston	A. B. Curry Ellison	Charleston	2nd Tues.
Logan	Thomas P. Long	Lorado	John R. Wilkinson, Jr.	Man	2nd Wed.
Marion	F. W. Mallamo	Fairmont	G. Thomas Evans	Fairmont	Last Tues.
Marshall	H. B. Ashworth	Moundsville	J. W. Myers	Moundsville	Semi-Ann.
Mason	Don F. Hatten	Pt. Pleasant	J. Berrye Worsham	Pt. Pleasant	Bi-Monthly
McDowell	Louis Vega	Welch	George L. Fischer	Welch	2nd Wed.
Mercer	Henry F. Warden, Jr.	Bluefield	John J. Mahood	Bluefield	3rd Mon.
Mingo	Robert J. Tchou	Williamson	Carl J. Greever	Williamson	2nd Wed.
Monongalia	R. J. Nottingham	Morgantown	C. C. Romine	Morgantown	1st Tues.
Ohio	S. S. Bobes	Wheeling	H. G. Dickie	Wheeling	4th Tues.
Parkersburg Academy	William E. Gilmore	Parkersburg	Robert C. Lincicome	Parkersburg	1st Thurs.
Potomac Valley	H. Luke Eye	Franklin	Philip G. Staggers	Keyser	2nd Wed.
Preston	D. R. Davis	Kingwood	C. Y. Moser	Kingwood	4th Thurs.
Raleigh	Harry F. Cooper	Beckley	Thomas L. Martin	Beckley	3rd Thurs.
Summers	D. W. Ritter	Hinton	B. W. McNeer	Hinton	3rd Mon.
Taylor	R. D. Stout	Grafton	Herbert N. Shanes	Grafton	Last Thurs.
Wetzel	Lemoyne Coffield	New Martinsville	C. P. Watson, Jr.	New Martinsville	Monthly
Wyoming	Ward Wylie	Mullens	Mario Cardenas	Mullens	Quarterly

County Societies

BARBOUR-RANDOLPH-TUCKER

The regular monthly meeting of the Barbour-Randolph-Tucker County Medical Society was held at Iaquinta's Restaurant in Galloway on September 21. Dr. John L. Rittmeyer, the president, presided at the meeting which was attended by 18 members and guests.

Dr. Karl J. Myers introduced the guest speakers, Drs. Frank J. Gregg and Robert Heiber of Pittsburgh, who discussed "Anticoagulants in Cardiovascular Diseases."

The speakers emphasized the dangers of long-term anticoagulant treatment and stated that a great divergence of opinion still exists as to any clear cut indications for their use. They stated, however, that certain type patients definitely should be given anticoagulant therapy, such as the patient who is an apparent impending coronary with frequent chest pain unrelieved by nitroglycerin and a normal or unchanged cardiograph.

They said a definite contraindication would be the history of familial blood disease and history of bleeding ulcers or hemorrhoids and evidence of any liver dysfunction.

During the business meeting a film produced by the American Cancer Society was shown. The Society approved this film for showings before lay groups.

A joint meeting of the Barbour-Randolph-Tucker Medical Society and the West Virginia Thoracic Society was held at Phil's Restaurant in Elkins on October 10.

The speaker was Dr. Stuart Willis, president of the National Tuberculosis Association, who presented a paper on "Treatment of Pulmonary Tuberculosis." He said that recent strides in the treatment of tuberculosis had made tremendous impact as shown by the decrease in the death rate from the disease.

Doctor Willis said that tuberculosis is still among us and that there are approximately 12,000 deaths in the United States each year from this disease alone. He added that the morbidity rate is also dropping more slowly.

Among the guests at the meeting were Mr. Hupp Otto of Wheeling, president of the West Virginia Tuberculosis and Health Association, and Mr. Thomas A. Deveny, Jr., of Charleston, executive director of the Association.

Dr. John L. Rittmeyer, the president, presided at a short business meeting following the scientific session. —Charles L. Leonard, M. D., Secretary.

* * * *

CABELL

Dr. James A. Heckman was elected president of the Cabell County Medical Society at the regular monthly

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meeting which was held at the Hotel Frederick in Huntington on October 12. Other new officers are as follows:

Dr. Jack Leckie, president elect; Dr. Clarence H. Boso, vice president; Dr. W. L. Neal, secretary (reelected); and Dr. Walter R. Wilkinson, treasurer. Dr. Ray M. Bobbitt was reelected a member of the board of censors.

The retiring president, Dr. C. Stafford Clay, presided at the business meeting. Mr. Bos Johnson of WSAZ-TV, general chairman of the 1961 United Community Fund campaign, made an appeal for financial support of the medical profession in Cabell County.

The Society voted to approve the formation of a local chapter of the Medical Assistants Society. Doctor Clay also announced that, at the request of the Cabell County Bar Association, he had appointed the following physicians as members of the legal liaison committee: Dr. James A. Heckman, chairman; and Drs. Richard J. Stevens and George F. Woelfel.

"The Next Step," a film on the development and use of the Sabin oral live polio vaccine produced by Pfizer Laboratories, was shown during the meeting.—W. L. Neal, M. D., Secretary.

* * * *

McDOWELL

Dr. George L. Fischer of Welch was elected president of the McDowell County Medical Society at a meeting held at the Stevens Clinic in that city on November 8. Other new officers are as follows:

Dr. John H. Burke, vice president; Dr. J. Hunter Smith, secretary; and Dr. John S. Cook, treasurer.

Drs. R. H. Edwards, David J. Skewes and Stephen Mamick were elected as delegates to the 1962 annual meeting of the State Medical Association. Named as alternates were Drs. Dante Castrodale, A. J. Villani and George L. Fischer.

Dr. Louis Vega, the retiring president, presided at the meeting. Plans for participation in the Diabetes Detection Week were discussed, and a movie on the relationship between cancer and viruses was shown.—J. Hunter Smith, M. D., Secretary.

* * * *

MERCER

Dr. Brookins Taylor was the speaker at the regular monthly meeting of the Mercer County Medical Society which was held at the West Virginian Hotel in Bluefield on October 16. The meeting was preceded by a social hour at the University Club.

Doctor Taylor presented an interesting paper on "Oral Hypoglycemics and Treatment of Diabetes," and he stated that Orinase appears to be the drug of choice. He also discussed theories regarding the physiology of these drugs.

Dr. Henry F. Warden, Jr., the president, presided at the business meeting. Dr. Sam Milchin presented a report on behalf of the nursing home committee. He said that a lawyer had been contacted regarding formation of a non-profit corporation to promote construction of a nursing home, and added that there was also a

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possibility that a tract of land would be donated by the Mercer County Court. The Society voted to bear the expenses of securing a charter for the corporation.—John J. Mahood, M. D., Secretary.

* * * *

MONONGALIA

Dr. Paul Gyorgy of Philadelphia was the guest speaker at the regular monthly meeting of the Monongalia County Medical Society which was held at the WVU Medical Center in Morgantown on October 3.

Doctor Gyorgy, who is Professor of Pediatrics at the University of Pennsylvania School of Medicine, presented an interesting paper on "Nutrition in Relation to Liver Disease."

A business meeting was held at the Hotel Morgan preceding the scientific session.—C. C. Romine, M. D., Secretary.

Athletic Injuries

What are the responsibilities of a physician in prevention and treatment of athletic injuries? It is the responsibility of the physician to provide preseasonal histories and physical examinations, and in this manner to eliminate those who are physically incapable of physical exertion. (To these individuals some other form of activity compatible with their physical capabilities should be made available).

He should see to it that records of injuries and illnesses are kept and reviewed. He should accept the responsibility of referral when he is confronted with a problem which he is not capable of treating. He should be available to advise with school authorities and coaches on medical costs and financing as well as suitable insurance programs.

He should check dressing rooms pre-game, at halftime and after the game for any injuries, illnesses or strange behavior. He should be available during practice hours and should know the players. He should be on the bench and be "in the know" on the mechanism and treatment of athletic injuries, and he should make decisions regarding playability. This is not a decision for coach, parent or player. It is one that should be made by the physician without pressure or influence from outside sources.—Fred L. Allman, Jr., M. D., in Journal of the Medical Association of Georgia.

No Drug Breakthroughs in USSR

A couple of years ago I spent a good deal of time with a Russian mission representing the drug industry, including a Mr. Natradze who, I understand, is or was the head of the whole Russian pharmaceutical operation. From him I learned about the Soviet system, and it does supply medicine for the sick. But in the 40-odd years of its existence the Soviet Union—despite its achievements in space—has not produced a single important pharmaceutical breakthrough—Francis Boyer, Chairman of the Board, Smith, Kline & French Laboratories.

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EASTERN PANHANDLE

Members of the Woman's Auxiliary to the Eastern Panhandle Medical Society were hostesses for the ladies' entertainment program in connection with the annual Potomac-Shenandoah Valley Postgraduate Institute which was held in Martinsburg, October 27-29.

Mrs. Vernon L. Dyer of Petersburg, President of the State Auxiliary, was the guest speaker at a luncheon meeting held at Ferry Hill Inn on Friday, October 27.

A smorgasbord luncheon and a bridge party was held at the Shady Rest Motel on Saturday afternoon. The group also traveled to Harpers Ferry where there was a conducted tour of the National Monument and several antique shops.

The speaker at the banquet on Friday evening was Virgil Carrington Jones, whose subject was "Civil War Guerrillas in the Eastern Theatre."

Drew Pearson was the speaker at the dinner on Saturday evening. He discussed his recent visit to Russia and participated in a question and answer period.

"Medical Ethics for the Doctor's Wife" was the subject of a talk given by Dr. Perry S. MacNeal at a luncheon meeting on Sunday. The final entertainment feature was a social hour at the Shenandoah Hotel on Sunday afternoon.—Mrs. L. Walter Fix, Secretary.

* * * *

GREENBRIER VALLEY

Dr. George E. Farrell of Ronceverte was the guest speaker at a luncheon meeting of the Woman's Auxiliary to the Greenbrier Valley Medical Society which was held at the home of Dr. and Mrs. Paul E. Prillaman in Ronceverte on October 17.

Doctor Farrell gave an interesting talk on civil defense and explained the effects of fallout from atomic explosions. He also discussed fallout shelters and the best methods of protecting family health in the event of disaster.

Mrs. Stuart T. Bray, the president, presided at the

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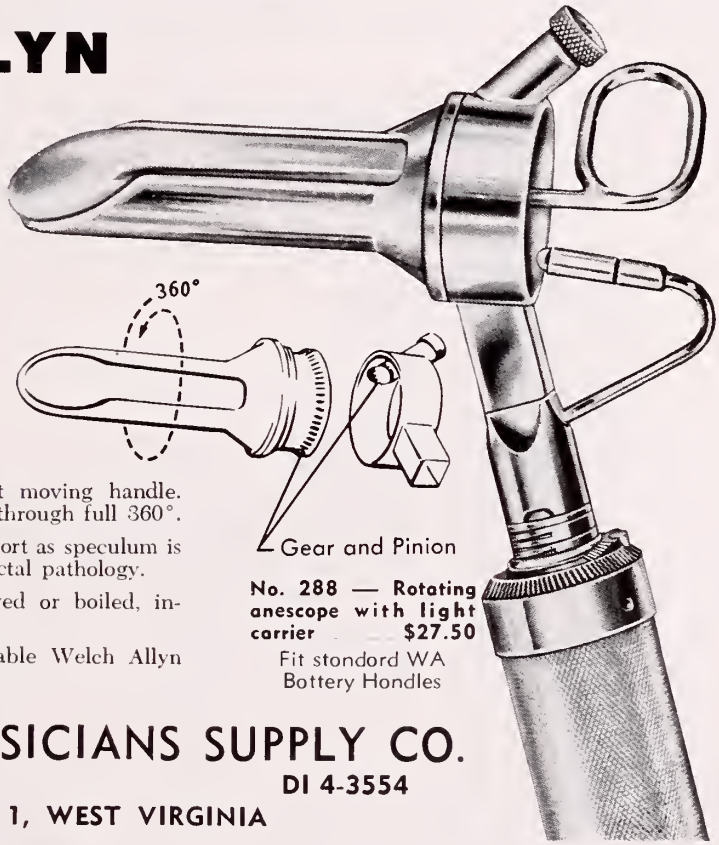

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business meeting.—Mrs. James P. Baker, chairman, Press and Publicity.

* * * *

HARRISON

Dr. John D. H. Wilson of Clarksburg was the guest speaker at a dinner meeting of the Woman's Auxiliary to the Harrison County Medical Society which was held at the Stonewall Jackson Hotel in that city on November 2.

Doctor Wilson presented an interesting talk on "Obscene Literature Available To Our Young People." He placed the obligation of censorship upon the family unit and explained that the moral standard of the locality sets the level of obscenity in any given community. A question and answer period followed his address.

Thirty-three members and five guests attended the meeting.—Mrs. J. Keith Pickens, Correspondent.

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REFERENCES

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KANAWHA

Members of the Woman's Auxiliary to the Kanawha Medical Society participated in mending clinics which were held at the homes of five members in the Charleston area on October 10.

Neighborhood meetings were held at the homes of the following members: Mesdames Earl A. McCowen, Benjamin Newman, Donald R. Gilbert, Robert C. Bock, and Paul C. Soulsby.

More than 1500 articles of clothing were collected for the Clothing Chest, a function of the Auxiliary established several years ago to provide clothing for needy school children in Kanawha County.

Working with the Kanawha County Board of Education, the Auxiliary has collected clothing in good repair and delivered it to the Board's warehouse. Attendance officers and school nurses serve as agents for distribution of articles from the Clothing Chest to needy children.

Mrs. William R. Rice, the president, and Mrs. Carl J. Roncaglione, chairman of the Clothing Chest, appeared at each of the neighborhood meetings and collected the clothing.—Mrs. Paul Francke, Publicity Chairman.

* * * *

MARION

"Problems of the Aged" was the subject of a panel discussion at a joint meeting of the Marion County Medical Society and Auxiliary which was held in that city on October 24.

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C. B. Harrington, Ph. D., a member of the faculty at Davis and Elkins College, served as moderator and the panelists were as follows:

Prof. T. R. Fulton, a member of the faculty of the Department of Sociology at West Virginia University; Mrs. A. H. Van Landingham of Morgantown; and E. B. Saunders, retired principal of Kelly-Miller High School in Clarksburg.

All of the panelists are currently serving as members of the West Virginia Commission for the Aging, which is composed of 17 professional and 12 lay members who serve on a voluntary basis. They were introduced by Mrs. David Bressler, chairman of the Auxiliary's Mental Health Committee.

The meeting was open to the public and was attended by a large number of persons from Fairmont and the surrounding area.—Mrs. William T. Lawson, Correspondent.

* * * *

McDOWELL

The annual Crippled Children's Benefit Bridge party, sponsored by the Woman's Auxiliary to the McDowell County Medical Society, was held at the Legion Club in Welch on October 11. Proceeds of the party were turned over to the Crippled Children's organization.

Mrs. Odis Glover was in charge of arrangements and wives of physicians served as hostesses throughout the evening.—Mrs. F. L. Johnston, Correspondent.

MERCER

Mrs. Iola Scrafford was the guest speaker at a luncheon meeting of the Woman's Auxiliary to the Mercer County Medical Society which was held at the Bluefield Country Club on October 16.

Mrs. Scrafford, who is a public health nurse and a member of the United Nations Committee in the Civic League, discussed "Medicine Within the United Nations."

She outlined the activities of the World Health Organization, a separate independent agency with its own constitution, membership, and which is free of any political influence.

Mrs. W. F. Hillier, Jr., the president, presided at the meeting, and the speaker was introduced by Mrs. C. D. Pruett.—Mrs. James E. McGee, Jr., Correspondent.

* * * *

OHIO

Mr. Thomas Goodwin of Wheeling was the guest speaker at the regular monthly meeting of the Woman's Auxiliary to the Ohio County Medical Society which was held at the Wheeling Country Club on October 24.

Mr. Goodwin, who is an attorney, gave an interesting talk on "Antiquated Laws of West Virginia." He was introduced by the program chairman, Mrs. Thomas L. Thomas.

Mrs. George M. Kellas, the president, presided at the business meeting. Hostesses were Mrs. Robert U.

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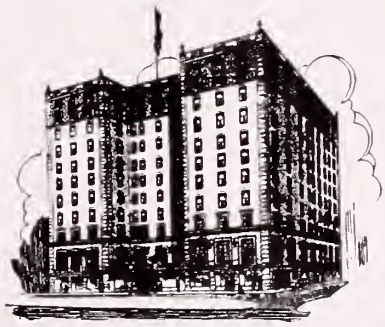

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* * * *

WOOD

The annual dues tea of the Woman's Auxiliary to the Parkersburg Academy of Medicine was held at the home of Dr. and Mrs. Richard W. Corbitt in Parkersburg on October 10.

Mrs. George Gevas, the president, and Mrs. Walter L. Kohlheim greeted the guests upon their arrival at the meeting.

Mrs. Michael A. Santer and Mrs. Charles H. Barnett, both past presidents, presided at the tea service.

Mrs. Corbitt was in charge of arrangements for the meeting and she was assisted by Mesdames Robert C. Lincicome, Harold W. Ulch, Rex Dauphin and D. E. Clark.—Mrs. Ira Connolly, Jr., Publicity Chairman.

Silence

Nothing more enhances authority than silence. It is the crowning virtue of the strong, the refuge of the weak, the modesty of the proud, the pride of the humble, the prudence of the wise, and the sense of fools. To speak is to . . . dissipate one's strength; whereas what action demands is concentration. Silence is a necessary preliminary to the ordering of one's thoughts. —Charles de Gaulle.

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FOR SALE—Physician retiring and desires to sell office equipment. Write GWN, The West Virginia Medical Journal, Box 1031, Charleston 24, W. Va.

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WANTED—Physician for general practice. Good opening. Associated with internist and surgeon. Write EKW, West Virginia Medical Journal, Box 1031, Charleston 24, W. Va.

WANTED—Radiologist for new 150-bed hospital with well equipped department. Write PW, Box 1031, Charleston 24, West Virginia.

WANTED—House physician for GP duty in general hospital (125 beds). No exchange students. Foreign graduates with immigrant visa and fluent English, $500 monthly and single maintenance. Write Kenneth N. Byrne, M. D., Superintendent, Emergency Hospital, Welch, West Virginia

WANTED—Physician to serve as chief of outpatient clinic in a 200-bed general medical and surgical hospital affiliated with the WVU School of Medicine. Salary dependent on qualifications. Many fringe benefits. Apply to Hospital Director, VA Hospital, Clarksburg, West Virginia.

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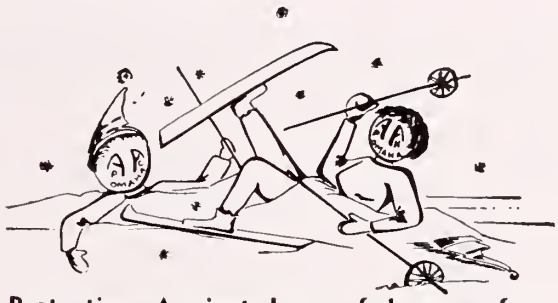
PRACTICE FOR SALE—Charleston, W. Va. Internal Medicine. Grossing above $75,000. Physician leaving January 1, 1962. Write CHS, The West Virginia Medical Journal, Box 1031, Charleston 24, W. Va.



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Book Reviews

TRAITOR WITHIN OUR SUICIDE PROBLEM—By Edward Robb Ellis and George N. Allen. 1961. Doubleday and Company, Inc., 575 Madison Avenue, New York 22, New York.

This is a fascinating book of 228 pages about suicide. It is divided into eleven chapters with an appendix plus an index. The chapters are under the following headings: "I—The Unrecognized Killer, II—Thousands Of Americans, III—Suicide in Other Countries, IV—Children Are Not Immune, V—"The Cruellest Month," VI—Suicide Can Be Contagious, VII—Superstition vs. Reason, VIII—Method Has Meaning, IX—How Sane Is The Suicide?, X—Suicide Notes, and XI—How We Can Conquer Suicide." There are also twelve lists, charts and graphs scattered throughout the book helping to add to its clarity.

This small compact volume is said to be the result of 15 years of painstaking research by the authors, and as one reads the interesting documentation and the historical case reports from many parts of the world, from ancient as well as modern times, the extent of the labor involved in writing this treatise is easily understood.

The pertinent facts about mans self-destruction which are brought out in this book make it extremely interesting reading. They also leave one with a number of unanswered questions as well as providing some satisfying answers and conjectures. The authors state that we can predict with a high degree of accuracy how many people will kill themselves in any year, in any country, state, or city. We can even predict exactly when these people will end their lives and how many at each age level will do so and what methods they will use to destroy themselves.

It is stated that men kill themselves three to four times as often as women and that three women live through suicide attempts for every man who trys to kill himself and survives. Certain countries are apparently suicide prone and yet their suicide rates may fluctuate widely during a decade. It is stated that "spring, when nature is at her smiling best, is the suicide season," yet, studying one of the graphs it would seem that the spring and fall equinox must have some bearing upon the matter.

The influence of world religions upon suicide is of extreme interest as well as the methods chosen by different peoples and different groups. It is stated in chapter IX that although many people think that anyone who kills himself must be insane, for the most part they are wrong. Psychiatrists declare that only a minority of suicides are psychotic.

The authors of this book flatly state: "We can conquer the traitor within; we can help a relative or friend overcome a suicidal urge." They further state that most potential suicides flash a danger signal so simple that the layman can easily recognize it. The book is a commendable presentation of a serious study of one of

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our most common causes of death. For white men between the ages of 20 and 45, suicide ranks fourth on the list of killers.

It behooves us as physicians to know more about the problem. This book is recommended to all students of human behavior.—E. Lyle Gage, M. D.

* * * *

APPRAISAL OF CURRENT CONCEPTS IN ANESTHESIOLOGY—By John Adriani, M. D., Professor of Surgery, Tulane University School of Medicine, New Orleans, La.; Clinical Professor of Surgery and Pharmacology, Louisiana State University School of Medicine, New Orleans, La.; Director, Department of Anesthesiology, Charity Hospital of Louisiana, New Orleans, La. Pp. 279. The C. V. Mosby Company, 3207 Washington Blvd., St. Louis 3, Missouri. 1961. Price $7.75.

Doctor Adriani, whose previous writings and texts have gained him recognition as one of the foremost teachers in anesthesiology, has again produced a volume of value and interest. The book is composed of 45 chapters. Each chapter deals with a separate clinical problem. Since there is no continuity as such, the book can be read piecemeal and enjoyed.

The book is a compilation of review topics which have been assigned to staff members and trainees in Doctor Adriani's department. There is some variance in quantity and quality of material presented which is usually not found in Doctor Adriani's texts. Only two chapters are lacking of references.

The majority of topics covered are quite timely. All are interesting. This book is recommended to the busy clinician or resident in training as a summary of thinking on many current problems. It will be of particular interest to the candidate for specialty certification for sources of material.—Harry S. Weeks, Jr., M. D.

* * * *

HOSPITALS, DOCTORS, AND DOLLARS.—By Robert M. Cunningham, Jr., Editor of the Modern Hospital. Pp. 268. F. W. Dodge Corporation, 119 West 40th Street, New York 18, New York. 1961. Price $6.95.

This book is apparently a melange of articles which have appeared in "Modern Hospital." There is no denial that the author has shown the qualifications of both an author and an interpretive writer. His material ranges from generalities through specialties to personalities. This apparent lack of continuity makes it possible to open the book at any chapter and find something which was of current interest several years ago, and yet of interest today.

I enjoyed very much the sketch of an old friend, Dr. Morris Fishbein. The old fire horse of American medicine is still very much alive and still makes his presence felt in current social and political medical activities.

After several years of frustrating silence, I just must pose one query, why can't book publishers shed their Klein Bargain Basement complex and price their products in even half or whole dollar figures. No intelligent reader is hoaxed by a price tag of x dollars 95 cents. This only brings the suspicion of a marked-down clearance sale. I shouldn't really object because my book came gratis.—James S. Klumpp, M. D.

* * * *

THORACIC DISEASES—By Eli H. Rubin, M. D., F.A.C.P., F.C.C.P., Professor of Clinical Medicine, Albert Einstein College of Medicine, Yeshiva Univ.; and Morris Rubin, M. D., F.A.C.S., F.C.C.P., Associate Clinical Professor, Thoracic Surgery, Albert Einstein College of Medicine, Yeshiva University; in association with George C. Leiner, M. D., F.A.C.P., F.A.C.C., Columbia Univ., College of Physicians and Surgeons; and Doris J. W. Escher, M. D., Columbia University, College of Physicians and Surgeons. Pp. 968, with illustrations. Philadelphia & London W. B. Saunders Company. 1961. Price $25.00.

This is a large and well-written book that very adequately covers almost every disease and ailment found in the thorax, or associated with the thorax. This is a good book for physiological review as well as etiological survey and gives extensive differential diagnosis and considerable treatment.

Treatment of some of the diseases of necessity is limited or omitted while others of the more common thoracic diseases such as cancer of the lung and tuberculosis are very completely discussed including the treatment. This book combines pediatric cardiopulmonary diseases as well as those of adults. It quite extensively covers the more rare diseases associated both with the thorax and also those causing thoracic complaints or changes due to systemic diseases.

Cancer of the esophagus could be covered a little more completely. This is about the only subject that is not well covered in the book. Chemotherapy of cancer of the lung and neoplasm of the mediastinum also could be in more detail as this is a rapidly growing field.

This is a good book for the resident in training in thoracic surgery, a good reference book for the general practitioner as well as the internist and also a well-informed reference book for the trained thoracic surgeon. The illustrations are very good.—Morris H. O'Dell, M. D.

Hungry, exhausted and frightened, the man wearing hunting togs dropped the rifle he had been dragging, stumbled forward, threw his arms about a man who had emerged from a patch of timber, and cried, "Thank heavens, mister! I've been lost for two days—and am I glad to see you!"

"What are you so glad about?" mumbled the other. "I've been lost a week."—Anon.

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The West Virginia Medical Journal

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Overweight

Thomas H. McGavack, M. D.

In its strictest sense obesity is an excess accumulation of fat. In men, it is said to exist when 20 per cent or more of the body weight is fat and in women, when this figure is 25 per cent or above. Obesity is commonly, though not necessarily, associated with overweight. In the United States, it is estimated that somewhat over 15 million persons are 10 per cent overweight and slightly more than 5 million 20 per cent overweight; four-fifths of the latter are more than 40 years of age. It has been observed that the number of individuals who are overweight in this country is formidable and apparently on the increase.[1, 2]

MacBryde[3] comments that "immoderate accumulation of adipose tissue may occur at any age, but is more common in middle life." In a thousand randomized subjects of all ages, of which two-thirds were women and one-third men, the incidence of obesity was highest in both sexes between the ages of 40 and 60 years (Table 1).[4] A decrease in the incidence of obesity began around 50 years of age, so that in those over 70 it actually was lower than in young individuals under 30 The distribution curve is in itself mute testimony to the fact that overweight people do not ordinarily live to a "ripe old age." There is a further lesson to be learned from this table, namely, that the major increase in weight occurs at a time when activities are beginning to wane, and when food intake often remains as high as it was in the earlier years.

Etiology and Classification

An understanding of the etiological factors of overweight, schematically represented in Figure 1, is fundamental to rational therapy. All obesities may be described as either exogenous or endogenous in origin. Similarly, they may be considered either genetic or acquired, psychic or somatic. None of these three categories is mutually exclusive and in every instance sociologic and environmental factors must be superimposed upon any others which may be present.

Obesity results from an intake of energy greater than the output. This is a simple dictum and as true as when Newburgh enunciated it, after careful experiments, three decades ago.[5, 6, 7] At the time of Newburgh's work, however, it did much to reenforce the then already rampant feeling of contempt for the fat individual, who was believed obviously not able to control his own desires. It did much to engender and intensify the hopeless feeling of inferiority already experienced by many overweight individuals. It did much indeed to repopularize the 19th century classification of obesity by which the condition was facetiously divided into three stages: the enviable, the comical and the pitiable.[8]

During the past two decades, a formidable literature has appeared as the result of widespread and intensive experimentation on the etiology of obesity; several excellent reviews and critiques exist.[9-19] A good many classifications of obesity depend upon the viewpoint of the individual worker. There is certainly no classification which is entirely satisfactory. Obviously, the advantage of any classification based on etiologic or any other grounds depends entirely upon how useful it may prove as a guide to therapy. The classification, which is here proposed, is drawn from several sources.[9, 12, 17, 19, 20]

The Author

- **Thomas H. McGavack, M. D., Chief, Intermediate Service, Veterans Administration Center, Martinsburg, W. Va.; and Professional Lecturer in Medicine, George Washington University School of Medicine, Washington, D. C.**

Submitted to the Publication Committee, July 15, 1960.

While it leaves much to be desired, it takes cognizance of the fact that there are more reasons than gormandizing for an increase of energy intake in excess of energy outgo. For instance, from Mayer's viewpoint, all obesity is due to overeating, in the sense that more energy is taken in than is needed for body metabolism. In this strict sense, all obesity can be considered exogenous, the result of hyperphagia. Nevertheless, to find the real cause of the obesity, as Mayer points out, one must go behind the scenes, and look for the cause of the hyperphagia, which results in an energy intake that is greater than the energy outgo. When such information is available, we are at least in a position to know how much we can do to remove the causes of the obesity, which is really not a disease but a symptom or sign.

When we first "look behind the scenes" we may readily conclude that all obesity is endogenous, in the sense that the individual ingests more food than he requires because of some inward disturbance, some esoteric compulsion or disease, such as a glandular dyscrasia or perhaps a poorly adjusted personality, which finds escape from reality in the pleasurable pastime of eating. The experimental background of this classification is now quite extensive so that one can with some assurance apply the findings to the diseases found in man.

As indicated by Figure 1, we may recognize psychic and somatic factors in obesity, as well as an interplay between these two. Furthermore, it is quite clear that an hereditary or an acquired condition may be responsible either for the psychic or the somatic disturbance. For example, two well known forms of obesity in mice are hereditary in origin. The first is Danforth's[21] "yellow obesity," which is a heterozygous dominant characteristic. The second is the "hereditary obese hyperglycemic syndrome,"[22] which is due to a homozygous recessive characteristic. There is a third hereditary form of overweight recently described in mice as "NZO obesity,"[23] which also is due to a homozygous recessive characteristic and, like the obese hyperglycemic syndrome, is associated with diabetes or a diabetic-like syndrome but which, unlike this condition, does not interfere with normal mating and offspring. Contrast these hereditary syndromes with acquired obesity due to the stereotactic bilateral destruction of the ventromedial nuclei of the hypothalamus[24] or the symmetrical destruction in this same area by the administration of aurothioglucose.[25]

The Snare of Automation

Impinging upon obesity either of psychic or somatic origin are all of the socio-economic or environmental influences to which the individual is subjected. Both mental and physical activity are concerned with energy expenditures. One of the most potent aggravating causes of obesity in the United States today is our continuing trend towards automation, which results in less and less physical activity even on the part of the young individual. Thirty years ago, no college student thought of having an automobile; today, it seems to be a necessity. Furthermore, as compared with ten years ago, the present car is equipped with power brakes, power steering and an automatic transmission and gearshift, so that virtually no energy is expended in the act of driving, which used to require a reasonable amount. The housewife never scrubs the clothes and, in most instances, does not have to lift the mop in doing the dishes. Floors are waxed by machine and

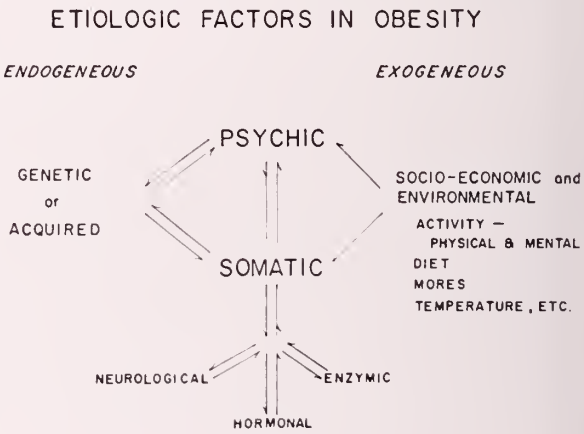

Figure 1

Table 1

OBESITY BY DECADES — 1000 CASES*

Age	0-20	21-30	31-40	41-50	51-60	61-70	71 & over	TOTAL
Men	1	11	53	85	68	18	8	244
Women	7	65	178	238	196	62	10	756
Total	8	76	231	323	264	80	18	1000

*From Ref. 4.

not by hand and so it goes down the line of everyday activities.

Our surplus of food, the refinement of food, the ease of preparation of tasty dishes, the much "stepped up" standard of living, all have combined to increase the amount eaten by the average individual in this country, another factor which suggests why one out of four individuals tends to be overweight.

Mores

The mores of the country play a role in keeping people slender or allowing them to be fat. Perhaps Bruch[8] expresses the general attitude of people in the United States when she says, "People are classified into fat and non-fat, with a feeling of contempt and hatred for the fat one; and envy and hopeless inferiority in relation to the slender one. Many of the personality features of these people, their shyness and oversensitivity, their easy discouragement in the face of difficulties or when confronted with the slightest rejection, their tendency to depression and their phlegmatic manner may be considered sequels to their constant concern with the impression they make on account of being obese—at least it might appear so."

Banting,[26] in 1863, expressed very much the same sentiment. In Syrian culture, however, even today, the larger the hips and thighs, with retention of small upper body, the more marriageable the individual. Somewhat in contrast is the comment of the French physician earlier this century, that "each woman considers herself duty bound to be fat around the neck, the shoulders and the arms while preserving a reduction of the waist line."[8] It is said that "Roman mothers during the empire starved their daughters to make them slender as rushes and eligible in the marriage market."[27] The same source called attention to the fact that Tunisians fatten their young ladies before marriage by cooping them up in a small room and feeding them "a seed which is of an extraordinarily fattening quality." One might quote further the influence of mores upon weight. Ogden Nash once said, "Some ladies smoke too much and some ladies drink too much and some ladies play too much, but all ladies think they weigh too much."

Causes

In experimental obesities, temperature has played a rather decisive role, particularly in the obese, hyperglycemic type of animal which, despite the maintenance of normal physical defenses against cold such as piloerection, vasoconstriction and so forth, is incapable of raising his metabolic rate and dies rapidly when exposed to low temperatures. Human beings, including the fat ones, differ one from another in their tolerance for cold. It seems quite possible that there is a human counterpart for the "hereditary obese hyperglycemic syndrome" of mice.

We shall not dwell specifically on the many psychic factors which tend to cause overweight. From our observation of a great many fat people, however, and the treatment they have had at the hands of both the physician and the psychologist, one might be led to believe that these influences often have been overemphasized. Of course they are important factors in many cases, but probably not in the majority.

When one turns to the somatic causes of overweight in the human being, it is clear that a large number of the conditions shown in Table 2 represent rather rare diseases, often with bizarre and unusual symptoms, which readily call attention to their presence. These can, therefore, usually be rather readily removed from the general group of overweight individuals and treated in consonance with the generally accepted and usually easily determined causation. While some of the genetic conditions listed in this table are associated with findings so dramatic as to be unmistakable, is it not possible that the obesity which is herewith inherited can be present also as a genetic characteristic in an individual who lacks most, if not all, of the other dramatic features of the condition described? In other words, if these bizarre characteristics can be genetically encoded in an individual's DNA, is it not possible that other messages also can be genetically encoded which lack some of the characteristics present in these diseases, and yet maintain the feature of obesity? Here might appear disturbances in enzymic processes with an encoded message predisposing the individual to a variation in phosphorylation or to an abnormality of the oxidation of glucose, or to hyperlipogenesis where perhaps abnormalities simultaneously exist in the pancreatic beta cells.[19]

One must not deny the presence also of what we have termed "habit hyperphagia." This is one cause of the obesity which has been described as "running in families." Again, this is often the cause of the increasing weight which goes with increasing years. It is represented by the individual who decreases his activity without decreasing his food intake and, therefore, creates an energy intake greater than his energy expenditure.

Fat Distribution

Thus far we have spoken of obesity as though it were a generalized phenomenon, present with equal intensity in various parts of the body. There is another classification of obesity that is

often useful and essentially descriptive. Emphasis here is upon the point that fat may be commonly distributed in one of four ways: (1) about the head, neck and upper body, thus, representing an accentuation of the masculine configuration and, in its most extreme forms, alluded to as the "bullfrog," "buffalo" or "humpty-dumpty" type; (2) about the lower abdomen, hips and thighs representing an exaggeration of the feminine configuration and, in its extreme form, illustrated by the well-known familial lipodystrophy; (3) in girdle fashion with "rolls" of fat about the chin, the axillae, the breasts, the abdomen, the hips and the thighs and in its extreme forms about the elbows and the knees. At one time this was termed "hypopituitary obesity," later called "hypothalamic obesity" and, while neurologic in origin, probably is due not only to hypothalamic damage but also to changes in nearby structures; (4) generalized obesity in which the entire body and extremities share rather evenly in the distribution of fat. The above described variations in the distribution of fat may at times lead us to diagnostic conclusions and to useful therapeutic procedures. Therefore, they should not be ignored in assessing the individual who presents himself for the treatment of overweight.

The commonest iatrogenic form of overweight seen today is secondary to the use of adrenocortical steroids. This condition usually can be avoided if the physician employs small initial doses and is content to develop the therapeutic effect gradually.

What predetermines these variations in the distribution of fat is certainly at this time not known. If, however, we turn again from fat metabolism to the subject of glycolysis, it has been observed that different species vary tremendously in their capacity for glycolysis. Indeed, individuals of a given species differ from each other in this regard. Furthermore, such activity may vary from one organ or part of the body to another in a single individual.[28] When one considers that twelve times as much energy is released from burning one mole of glucose via the hexosemonophosphate shunt as via glycolytic cleavage the magnitude of these individual differences becomes apparent.

Appestat: Regulatory Mechanism

Since our definition of obesity involves the point that energy intake exceeds energy outgo, all types of obesity must be due either to an absolute or a relative hyperphagia. Let us look for a moment at the mechanism of the neurological causes of overweight. The term "appestat," originally employed as an abbreviation of the term "hypothalamic food-intake-regulatory mechanism" has now been applied by Tepperman[19] to include "all the central projections of the hypothalamic food intake complex." This regulatory mechanism includes the activities not only of the ventromedial nuclei and the more dorsolateral portions of the lateral hypothalamic nuclei, but also of certain areas in the ventromedial portion of the thalamus and rostral mesencephalic tegmentum, damage to which has been shown to cause obesity.[29]

Table 2

SOME "SOMATIC" CAUSES OF OBESITY

Hormonal

Genetic	Macrosomia adiposa congenita	Aspermatogenic gynecomastia without aleydigism, etc.	Defects or alterations in phosphorylation, glycolysis, lipogenesis, etc.
Genetic	Laurence-Moon-Biedl syndrome	Male hypogonadism (?)	Von Gierke's disease
Genetic	Hyperostosis frontalis interna	Pseudohypoparathyroidism	Familial hypoglycemosis (lack of alpha cells)
Genetic	Dercum's disease	Gout	
Genetic		Cushing's syndrome	
Genetic + Acquired	Functional hypothalamic imbalance	Bongiovanni-Eisenmenger syndrome	
Acquired	Frohlich's syndrome & disease		
Acquired	Chromophobe adenoma of the pituitary	Post-puberal castration; menopause, ovarian dysfunction, etc.	*"Habit" hyperphagia*
Acquired	Kleine-Levin syndrome		
Acquired	Cortical, sub-cortical & basilar traumatic and exenthematous disease	Iatrogenic disease from steroids	
Acquired		Insulinoma	

Normal feeding habits have been reportedly interrupted by destruction of the optic nuclei.[30] In rats, separation of the frontal lobes from their thalamic connections has led to obesity.[31] Lobotomized patients have suffered similarly.[12] Heinbecker[32] produced obesity by interrupting the descending fibers leaving the ventromedial nuclei. It is then to this entire regulatory mechanism that the word "appestat" should apply. When the ventromedial nuclei are bilaterally destroyed, hyperphagia ensues. The appetite is indeed voracious. By the same token, stimulation rather than destruction of this center produces hypophagia or aphagia. In contrast, destruction of the dorsolateral portion of the lateral hypothalamic area, in the same sagittal planes as the dorsomedian nuclei, produces complete anorexia. This occurs even though the ventromedial nuclei have been previously destroyed.

Amphetamine

It may be interesting to note that electrical activity in the medial part of the hypothalamus is altered by the administration of amphetamine.[14] Tepperman and his associates,[33] however, observed that mice with aurothioglucose obesity, in which there is complete selective destruction of both dorsomedial nuclei, were at least as responsive to the anorexigenic effect of amphetamine as normal mice. Since it can be demonstrated experimentally that a whole spectrum or group of food intake disturbances from anorexia to extreme hyperphagia can be produced by damaging the hypothalamus in various ways, certainly the possibility must exist that these structures may vary in function from human being to human being, by inheritance or by the acquisition of certain functional faults. Our recognition of the existence of such neurological changes should enable us to temper our treatment of individuals who complain bitterly of excessive appetite or excessive hunger.

Inherent in the hormonal causes of overweight should rest the guide to specific treatment.

For the disturbances of enzymic activity which are related to overweight, there is very little one can do therapeutically at the present time. Nevertheless, the realization that such disturbances may occur is a great step forward.

Problems Associated with or Complicating Obesity

The physician should be aware not only of the manifold causes of obsesity but also of some of its dangers. It is not uncommon to speak of the complications of obesity. It seems actually more accurate to speak of accompanying conditions, for obesity may not be causative but merely sharing a common etiology. As causes of death, both positive and negative correlations between obesity and the other conditions have been listed in Table 3. This table refers only to those causes of death in which there was a significant deviation of the percentage of actual deaths to the percentage of expected deaths. The table was compiled by the Metropolitan Life Insurance Company[34] from policies issued between 1925 and 1934, in which subjects had been traced to the policy anniversary of 1950, with attained ages of the subjects ranging from 25 to 74 years at the time of death. Among the principal cardiovascular renal causes of death the ratio of actual to expected deaths from chronic nephritis was by far the most dramatic, with a percentage of 191 for man and 212 for women. Cancer of the liver and gallbladder was the only malignancy which seemed to show a positive correlation between obesity and a significant increase in actual as compared with the number of expected deaths. In general, conditions affecting the hepatobiliary system showed an increase in the ratio of actual to expected deaths. These included diabetes, cirrhosis of the liver, various types of gallbladder disease and, particularly, biliary calculi. The fact that accidents were a more common cause of death in the overweight than in the normal weight would suggest some difference in the sensory alertness of such individuals, or in their capacity to act quickly.

From the increased incidence of deaths among the obese from appendiceal and other abdominal surgery, it would seem that these people represent an added risk in the operating room. That the relation of disease to mortality in the obese is not one of simple cause and effect is further illustrated in the list of the principal causes of death. There were some diseases in which a negative correlation existed between the percentage of actual and expected deaths. This held true for suicide, tuberculosis, diseases of the breast, and ulcers of the stomach and duodenum.

Functional Tests

Associated with obesity are a number of functional disturbances which can be recognized by various laboratory procedures. Several factors are responsible for the increased expenditure of energy seen in obese individuals. The muscular effort of locomotion is augmented in direct proportion to the excess avoirdupois. Caloric needs vary with surface area, which increases in direct proportion to the increment in weight. The immediate excessive energy requirement must be met by overactivity of the liver, not only in the handling of food eaten but also in the mobilization, transport and degradation of depot fat for energy utilization. Finally, depot fat itself adds

to the overall metabolic needs of the body because (1) for each pound of fat, 2/3 of a mile of blood vessels is added to the work of the heart; (2) vital organs are crowded, particularly the heart, liver and kidneys, by the excess fat deposits and, thus, show a decreased mechanical efficiency; (3) the added adipose tissue is now well known to be a very active structure with continuing turnover of the nutrients present.[20]

Perhaps the liver suffers most from obesity. Since hepatic reserves are tremendous as compared with current needs, it has not been possible to assess lesser degrees of hepatic dysfunction by currently available laboratory tests. The fact, however, that dysfunction can be demonstrated in the markedly obese who appear otherwise in good health certainly leaves the inference that lesser degrees of overweight are surely damaging liver cells slowly and insidiously. On biopsy, the primary histological evidence for hepatic disturbance in the obese is the deposition of fat, which increases directly with the duration and degree of the overweight. This means that bromsulphalein retention will be among the first laboratory tests to show an alteration in hepatic function.

In a study of 20 individuals from 50 per cent to 97 per cent overweight it was found that bromsulphalein retention was abnormally high in 100 per cent, the glucose tolerance abnormal in 50 per cent, serum alkaline phosphatase increased in 27 per cent, prothrombin time prolonged in 15 per cent, cephalin flocculation positive in 20 per cent, thymol turbidity excessive in 50 per cent and urinary urobilinogen high in 32 per cent.[35] Exclusive of bromsulphalein excretion, which was abnormal in all subjects, this means that some hepatic dysfunction was present in 18 of 20 excessively overweight individuals. In men 15 per cent to 25 per cent overweight, another group of observers found abnormal alterations in thymol turbidity, cephalin flocculation and serum cholesterol determinations, as well as in glucose tolerance, but no change in bromsulphalein retention.[36]

On relatively high intakes either of sugar or alcohol the fatty liver commonly seen in the overweight subject is still further exaggerated.[37] Eighteen selected obese patients ranging in age from 28 to 69 years and without any other recognizable disease showed abnormal bromsulphalein retention in 13 of 14 patients tested.[38] Eleven of 17 individuals had a diabetic type of glucose tolerance. Most of the other patients showed normal reactions. The patients were from 25 per cent to 110 per cent over desirable weights. These workers suggested that some of the damage may have been due to the fact that most of the calories in these individuals were derived from nonprotein sources. Such diets are known to produce fatty metamorphosis and cirrhosis of the liver in small laboratory animals.[39] It is presumed that this may be a factor in producing the hepatic disturbances in man.

We have already commented upon the fact that obese "normal" patients are subjected to an increased cardiac load. This has now been well demonstrated by a large number of investigators and will not be dwelt upon further here.

Table 3

PRINCIPAL CAUSES OF DEATH IN OBESE MEN AND WOMEN*

	Men		Women	
Cause of Death	*No. of Deaths*	*Actual % of Expected Deaths*	*No. of Deaths*	*Actual % of Expected Deaths*
Principal cardiovascular renal diseases	1867	149	1103	177
Cancer — liver & gallbladder	33	168	46	211
Biliary calculi and other gallbladder disease (except cancer)	51	172	80	248
Cirrhosis of liver	96	249	32	147
Diabetes mellitus	205	383	235	372
Appendicitis	76	223	41	195
Hernia and intestinal obstruction	39	154	31	141
Puerperal conditions			43	162
Accidents	177	111	74	135
Suicide	83	78	23	73
Tuberculosis	24	21	20	35
Breast conditions			81	69
Ulcer — stomach & duodenum	30	67		

*This is an incomplete list taken from reference 34. The data were originally derived from records of the Metropolitan Life Insurance Co., and involved policies, uprated because of overweight, issued between 1925 and 1934. These were followed to the 1950 anniversary date with attained ages of subjects ranging from 25 to 74 years at the time of death. The ratio of actual to expected deaths is based on contemporary mortality experience with standard risks.

Underlined figures lack a significant deviation from the normal.

Considerable attention recently has been paid to pulmonary function in obese but otherwise normal individuals.[40-45] Burwell and his associates[46] described a case of marked obesity with somnolence, hypoxia, hypercapnia, polycythemia and right heart failure, with relief of most of these symptoms following weight loss. Common among the changes in pulmonary function among obese subjects are a reduction in vital capacity and in the maximal breathing capacity, even though timed vital capacities and maximal breathing midexpiratory flow rates show no evidence of bronchial obstruction. In such individuals the dead space to tidal air ratio usually is greater than normal. A majority of obese subjects showed a lower $_pO_2$ and a heightened $_pCO_2$ pressure in the arterial blood. Red cell mass may be slightly increased in some of the subjects. There is also an increased oxygen cost of breathing in a majority of these obese subjects, which is attributed to an increase in the elastic resistance of the thorax.

Szenas and Pattee,[47] in a study of adrenocortical function in 16 obese subjects, found the average plasma 17-hydroxycorticosteroid level below normal range and the average urinary 17-hydroxycorticosteroid output higher than normal. A more rapid than normal disappearance of injected hydrocortisone sodium succinate was accounted for by the increased amount of this material in the urine. To them, these findings indicated an increased production and an increased removal of adrenal steroids in obese people.

Table 4

TREATMENT

1. Develop rapport with patient
   a) Learn eating habits
   b) Take out the moral sting
   c) Rate of reduction
   d) Appetite problem
   e) Other
2. Diet (See table 5)
3. Exercise—to 1) use energy 2) prevent atrophy 3) retard osteoporosis 4) preserve vital functions
   a) In normal—develop walking 3 mi./day as minimum
   b) Chronically ill—exercise to tolerance
4. Psychotherapy
5. Adjuvant therapy
   a) Anorexigenic agents
   b) Thyroid
   c) 11-oxycorticoids
6. Long range program

Treatment (Table 4)

Before the physician undertakes the active care of an overweight individual, he should assure himself concerning the type of obesity with which he is dealing. This can best be done along the general lines laid down in our discussion of etiology and classification. The physician should also be as sure as possible of his ground in regard to the previous eating habits of the patient. This is a particularly difficult problem with the older individual, who even at his best may forget many things done in the course of a day. In a hospital or home it is often best not to attempt reduction until the patient's eating habits have been studied for several weeks.

Rapport Between Patient and Physician

It seems of first importance to emphasize the point that obesity is not, nor does it raise, a moral issue. It is a medical problem of considerable complexity and necessitates complete understanding between the patient and physician at all times with complete respect for each other's integrity. It can certainly never be cured by blaming the patient for the obesity and shifting the entire responsibility for treatment upon him. An honest, sincere approach to the problem by the physician will inspire confidence in the patient. It will also be helpful to him to know that the physician recognizes some of the problems he (the patient) will have to face and perhaps in some measure the discomfort he will have to undergo. While doing this, some of the hazards of ill health associated with overweight should be discussed but not held as threats over the patient's head.

The physician must also be careful not to overemphasize the rewards to be obtained by following a strict dietary. There still is too little known about all the facets of obesity to predict the fruits of reduction with sweeping assertions. While the sheet anchor of relief from obesity lies in reducing the energy intake by restrictive diets, the cause of the condition may or may not be so easily attacked. It does seem to be true that the more conscientiously the patient diets and the more steadily his weight decreases, the sooner he will accustom himself to the reduced caloric intake. He may thereby be relieved of the rather distressing symptoms which previously compelled him to eat more energy materials than he could expend.

Diet (Table 5)

The dietary must be adapted to the individual patient and this becomes increasingly true in the older patient. "Fad" diets, however, or diets which do not meet minimal nutritional requirements are to be avoided, even though they may be liked by the patient. It must be kept in mind that the choice of foods by obese individuals and their feeding patterns are as diverse as those of normal subjects. Therefore, within reasonable

limits, each patient's likes and dislikes must be considered.

With full allowance for the specific tastes of the individual certain general principles of diet should control our prescriptions for the older obese subject.

In the first place the condition of the digestive tract must be considered. Many older individuals lack most or all of their teeth. Food is "mouthed" and not chewed. Chronic atrophic pancreatitis is a more common condition than formerly thought. The high incidence of biliary tract disease in obesity has already been mentioned. Each of these and other digestive problems require corrective therapy, part of which must be dietary.

In the older patient, it is well to divide the diet for the day into five or six meals rather than the usual three. This does not mean the interpolation of the usual so-called "snacks," which are invariably high in caloric equivalents. It does mean the use of calorically small feedings between meals. In some patients, coffee and tea are acceptable with such in-between feedings and in others they should be avoided as too stimulative of appetite and circulation.

In many overweight people, breakfast has been a meal to be shunned. This habit should be broken as soon as practicable; breakfast should be looked upon as one of the best meals of the day.

The caloric deficit established for the diet should be as large as is compatible with the management of other problems present in the individual case. Even if the deficit is small, it will eventually result in a loss of weight. In this connection, it should be emphasized to the patient that the weight was not gained in a period of several weeks and, therefore, for optimal health, should not be lost rapidly. Often the simple expedient of such an explanation successfully solicits the patient's interest in the physician's regimen and maintains him faithful to the diet over the long periods of time necessary to effect a satisfactory reduction.

The diet should contain an adequate amount of protein. In the older individual this should be at least 1 Gm. per kilogram of "ideal" weight, and it is believed by some that it should be higher.[48] Since a large percentage of the fat can be obtained from the body's own stores it is not necessary to give too much thought to the amount of fat, except to be sure that the diet is an economical one, not necessitating the splitting of eggs or the cutting away of all fat from meat. Very satisfactory prescriptions can be written at the 1000 calorie level, but diets between 1500 and 1800 calories often will allow satisfactory weight reduction and inclusion of a splendid variety of foods.

Naturally, the size of the negative caloric balance determines the rate of weight loss per day. One hundred Gm. of fat is the equivalent of 930 calories. In view of the protein and water in fatty tissue, this deficit would represent a loss of 115 Gm. of tissue. Similarly, a weight loss of 1 pound would represent a deficit of approximately 3700 calories. Rarely is it possible to achieve a weight loss much above 3 to 3½ pounds a week, although in the first week of the regimen the water loss may be excessive and a much larger amount than this disappear. As a general rule, we consider a 6 to 8 pound weight loss per month quite satisfactory and about as high a loss as is safe for the individual.

If the reducing diet is faithfully followed, one should not trust it to provide the patient a sufficient supply of trace minerals and vitamins. This is particularly true of the water soluble vitamins, calcium and phosphorus. Therefore, mineral and vitamin supplements should be prescribed for all patients who are reducing. While this may be polypharmacy, we believe it wise and we employ a tablet or capsule containing the minimal daily requirements of the known vitamins and of the usual trace minerals.

Table 5

DIET

1. Individual variables
   a) Likes and dislikes
   b) Condition of mouth
   c) Pancreatic & biliary tract disease
2. Five or six feedings daily
3. Emphasis on breakfast
4. Caloric deficit—as high as possible
5. Adequate protein—1.5 Gm./kg.
6. Vitamin and mineral supplement
7. The prescription for ideal weight of 70 kg.

Cal.	C(Gm.)	P(Gm.)	F(Gm.)	Body Fat Tissue (Min. Amt. in Gm.)
1000	90	70	40	90
1200	125	80	45	65
1500	135	100	65	30

Exercise

Regular exercise is one of the most important things in the general conditioning of the older patient, whether he be overweight or not. It is true, there may be interference with such conditioning when the patient has cardiac disease, pulmonary emphysema or arthritis. In such instances, however, a regimen of activity still should not be ignored and an effort should be

made to improve exercise tolerance steadily through the weeks and months. It must be remembered that all forms of arthritis are improved by exercise if it is not carried beyond the tolerance of the joint surfaces. The same applies to the degenerative types of heart disease. There are today many sufferers from the atrophy of disuse of cardiac muscle on the advice of physicians, who have warned the individual to "take it easy." In our handling of older veterans, this problem is repeatedly met.

Pulmonary emphysema creates one of our worst problems in connection with exercise in the older individual. When such emphysema is aggravated by overweight, however, the simple expedient of reduction obviously will improve pulmonary function to some extent. Indeed, we have often seen distress attributed to pulmonary emphysema disappear entirely when weight reduction was satisfactory.

Where we are dealing with the obese, otherwise normal, older male, the individual's tolerance for exercise is determined and is slowly increased. It is our desire that every individual develop a minimal exercise tolerance corresponding to approximately three miles of walking a day, even though he does not gain all of this exercise in that particular pastime. Walking probably is one of the best forms of exercise for the older person, as it brings into action every part of the body. It should be at a good brisk rate if there is no contraindication to ordinary activity. In other words, it should be possible to walk three miles in approximately an hour. If, however, there is a cardiac or other contraindication to rapid walking, then the pace should be adjusted to the individual's needs and, if possible, tolerance slowly increased. While I believe this instruction is important to all people, irrespective of the time of life or the complications present, it is certainly essential for the health of individuals beyond the age of 45. A moderate amount of exercise taken daily is infinitely better than vigorous exercise taken once or twice weekly. The lack of regular daily exercise probably is one of the worst faults inherent in our manner of living in the United States today.

Adjuvant Therapy

From an endocrine viewpoint, thyroid hormone probably has been used more than any other drug in the management of obesity. There is no really good reason for such therapy, unless the presence of hypothyroidism can be proved. The normal individual with obesity has a normal metabolic rate. In fact, his energy expenditure is above normal and thyroid feeding exerts very little influence on the reduction process. Furthermore, it may produce unpleasant symptoms such as nervousness, palpitation and precordial distress.

As far as other endocrine preparations are concerned, there is none which has a place in the routine management of obesity. In cases, however, of familial lipodystrophy and in instances in which the patient, usually a woman, states that she cannot reduce without becoming very wan and thin in the face and upper part of the body while not losing "where she wishes to most," the adrenal steroids of the 11-oxycorticoid type have been useful, provided the individual faithfully maintains a reducing diet. Under these conditions, a redistribution of weight certainly occurs. In terms of hydrocortisone the dosages do not have to be large, anywhere from 15 to 35 mg. daily, with long term maintenance doses never exceeding 25 mg. daily. On such a dose suppression of the adrenal gland rarely, if ever, occurs. The additive effect of the steroid enables the patient to attain normal upper body contours, while losing fat from the depots of the lower body.

It has been affirmed[14] and denied[33] that amphetamine has a direct action upon the ventromedial nuclei of the hypothalamus, stimulating them and thereby reducing appetite. In practice, we have found amphetamine preparations useful during the first weeks of treatment. As will be seen from Table 6 we have been able to eliminate psychological factors by the use of placebos in a double blind technique. In such patients, during

Table 6

COMPARISON OF AVERAGE WEIGHT LOSS OBSERVED WITH A PLACEBO, UNMODIFIED d-AMPHETAMINE,* AND SUSTAINED-RELEASE d-AMPHETAMINE*†

Medication	*No. of Subjects*	*No. of Trials*	*Average Time Observed (Wks.)*	*Loss (Lbs. per Wk.) Average Weight*
Placebo	64	64	6.0	0.6
Unmodified d-Amphetamine	103	118	7.1	1.2
Sustained-Release d-Amphetamine	104	104	6.2	1.2

*The total daily dose of each d-Amphetamine preparation was 15 mg.
†Reprinted from reference 20.

the first six to ten weeks of treatment there has been a definite increase in weight loss when amphetamine compounds are combined in adequate doses with proper dietary restrictions. We are equally clear that such treatment is of no value when continued longer than the periods of time mentioned above. Why this should be so we do not know. We do feel that members of the amphetamine group of drugs help the patient over one of the most difficult periods of reducing. Therefore, we believe they are useful in this restricted sense.

Tranquilizing agents have not been helpful in our hands as aids to weight reduction. Phenobarbital and other sedatives of the same group should not be used unless upon good individual indications not concerned with reducing *per se*.

Psychotherapy

We have not employed formal psychotherapy in patients who need to reduce because we feel that the attending physician can gain better rapport with the individual and do more to cope with the presumed psychic difficulties than the psychiatrist. This, of course, is true in the majority of cases. For those obese individuals in whom a psychotic condition simultaneously exists or in whom a psychic origin for the obesity can be readily proved, formal psychiatry holds a commanding role.

The Long-Continued Program

The patient should be made to understand that his reduction regimen is a long process, that it does not have to be difficult unless he makes it so, but that it will require a steadiness of purpose and a will to deny himself frequent orgies of overindulgence. Furthermore, it must be emphasized to the patient that, as he reduces, he will be returned to a more and more normal diet, and a more and more satisfying diet, closer to that which meets his day to day needs in full. This, however, will take months and should not be expected to happen after he has lost 15 or 20 pounds of a needed 40 to 50 pound reduction.

Conclusion

There still is no "royal road to reduction." Great strides, however, have been taken towards rationalizing the problem. Rapport between the physician and patient in a common objective has supplanted an earlier rigid "parent-bad-child" relation. There is understanding and help for the patient with a difficult problem. Formerly, he was dubbed either a psychoneurotic who escaped from reality through eating, or a weak-willed glutton upon whom sympathy should not be wasted. Today, the recognition of manifold physical as well as nervous and mental causes of obesity has laid the foundation for better and more effective treatment in the future.

References

1. Hundley, J. H.: Need for Weight Control Programs, in Eppright, E. S., Swanson, P., and Iverson, C. A.: Weight Control, Ames, Iowa, Iowa State College Press, 1955, p. 1.
2. Sebrell, W. H., Jr.: Symposium on Obesity: Metabolic Aspects of Obesity; Facts, Fallacies and Fables, Metabolism 6:411, 1957.
3. MacBryde, C. M.: Obesity, in Cecil, R. L., and Loeb, R. F.: A Textbook of Medicine, Philadelphia, W. B. Saunders Co., 1955, p. 689.
4. Preble, W. E.: Obesity: Observations on 1000 Cases, Boston M. & S. J. 188:617, 1923; (cited by Duncan, G. G., in Diseases of Metabolism, ed. 4, Philadelphia, W. B. Saunders Co., 1959, p. 532).
5. Newburgh, L. H., and Johnston, M. W.: The Nature of Obesity, J. Clin. Investigation 8:197, 1930.
6. Newburgh, L. H., and Johnston, M. W.: Endogenous Obesity: A Misconception, Ann. Int. Med. 3:815, 1930.
7. Newburgh, L. H.: Obesity, Arch. Int. Med. 70:1033, 1942.
8. Cited by Bruch, H.: Psychological Aspects of Obesity, Bull. New York Acad. Med. 24:73, 1948.
9. Rony, H. R.: Obesity and Leanness, Philadelphia, Lea and Febiger, 1940.
10. Bauer, J.: Obesity: Its Pathogenesis, Etiology and Treatment, Arch. Int. Med. 67:968, 1941.
11. Conn, J. W.: Obesity: II. Etiological Aspects, Physiol. Rev. 24:31, 1944.
12. Mayer, J.: Genetic, Traumatic and Environmental Factors in the Etiology of Obesity, Physiol. Rev. 33:472, 1953.
13. Mayer, J.: The Physiologic Basis of Obesity and Leanness, Nutrition Abstr. and Rev., Part I, 25:597, 1955; Part II, 25:871, 1955.
14. Mayer, J.: Some Advances in the Study of the Physiologic Basis of Obesity, Metabolism 6:435, 1957.
15. Bruch, H.: Psychiatric Aspects of Obesity, Metabolism 6:461, 1957.
16. Bruch, H.: The Importance of Overweight, New York, W. W. Norton Co., 1957.
17. Mayer, J.: Physiological and Nutritional Aspects of Obesity, Rev. Nutrition Research 19:35, 1958.
18. Stunkard, A.: Physical Activity, Emotions and Human Obesity, Psychosomatic Med. 20:366, 1958.
19. Tepperman, J.: Etiologic Factors in Obesity and Leanness, Perspectives in Biol. and Med. 1:293, 1958.
20. Gelvin, E. P., and McGavack, T. H.: Obesity: Its Causes, Classification and Care, New York, Paul B. Hoeber Co., 1957.
21. Danforth, C. H.: Hereditary Adiposity in Mice, J. Heredity 18:153, 1957.
22. Ingalls, A. M., Dickie, M. M., and Snell, G. D.: Obese, New Mutation in House Mouse, J. Heredity 41:317, 1950.
23. Bielschowsky, M., and Bielschowsky, F.: New Zealand Strand of Obese Mice; Their Response to Stilboestrol and to Insulin, Australian J. Exper. Biol. & M. Sc. 34:181, 1956.
24. Mayer, J., French, R. G., Zighera, C. F., and Barnett, R. J.: Hypothalamic Obesity in Mouse; Production, Description and Metabolic Characteristics, Am. J. Physiol. 182:75, 1955.
25. Marshall, N. B., Barnett, R. J., and Mayer, J.: Hypothalamic Lesions in Gold-Thioglucose Injected Mice, Proc. Soc. Exper. Biol. and Med. 90:240, 1955.

26. Banting, W.: Cited by Bruch.[5]
27. Wadd, W.: Cursory Remarks on Corpulence, ed. 3, London, J. Callow, 1816.
28. Lipmann, F.: In A Symposium on Respiratory Enzymes, Madison, Wisconsin, University of Wisconsin Press, 1942.
29. Ruch, T. C., Blum, M., and Brobeck, J.: Taste Disturbances from Thalmic Lesions in Monkeys, Am. J. Physiol. 133:433, 1941.
30. Rogers, F. T., and Hardt, L. L.: Contributions to the Physiology of the Stomach. XXVI. The Relation Between the Digestion Contractions of the Filled and the Hunger Contractions of the "Empty" Stomach, Am. J. Physiol. 38:274, 1915.
31. Richter, C. P., and Hawkes, C. D.: Increased Spontaneous Activity and Food Intake Produced in Rats by Removal of Frontal Poles of Brain, J. Neurol. and Psychiat. 2:231, 1939.
32. Heinbecker, P., White, H. L., and Rolf, D.: Experimental Obesity in Dog, Am. J. Physiol. 141: 549, 1944.
33. Wilson, M., and Tepperman, J.:[10] Unpublished data.
34. Dublin, L. I., and Marks, H. H.: Mortality Among Insured Overweights in Recent Years, Trans. A. Life Insur. M. Dir. America 35:235, 1952.
35. Zelman, S.: Liver in Obesity, A. M. A. Arch. Int. Med. 90:141, 1952.
36. Westwater, J. O.: Impaired Liver Function in the Obese, Bull. Moore-White M. Foundation 5:53, 1954.
37. Best, C. H., Hartroft, W. S., Lucas, C. C., and Ridout, J. H.: Liver Damage Produced by Feeding Alcohol or Sugar and Its Prevention by Choline, Brit. M. J. 2:1001, 1949.
38. Westwater, J. O., and Fanter, D.: Liver Impairment in the Obese, Gastroenterology 34:686, 1958.
39. Stare, F. J. (Ed.): Obesity and Liver Impairment, Nutrition Abstr. & Rev. 16:266, 1958.
40. Weil, M. H.: Polycythemia Associated with Obesity, J. A. M. A. 159:1592, 1955.
41. Burwell, C. S.: The Care of the Patient, New England J. Med. 254:944, 1956.
42. Estes, E. H., Jr., Sieker, H. O., McIntosh, H. D., and Kelser, G. A.: Reversible Cardiopulmonary Syndrome With Extreme Obesity, Circulation 16:179, 1957.
43. Lillington, G. A., Anderson, M. W., and Brandenburg, R. O.: The Cardiorespiratory Syndrome of Obesity, Dis. of Chest 32:1, 1957.
44. Kaufman, B. J., Ferguson, M. H., and Cherniack, R. M.: Hypoventilation in Obesity, J. Clin. Investigation 38:500, 1959.
45. Cole, V. W., and Alexander, J. K.: Clinical Effects of Extreme Obesity on Cardiopulmonary Function, Southern M. J. 52:435, 1959.
46. Burwell, C. S., Robin, E. D., Whaley, R. D., and Bickelmann, A. G.: Extreme Obesity Associated With Alveolar Hypoventilation. A Pickwickian Syndrome, Am. J. Med. 21:811, 1956.
47. Szenas, P., and Pattee, C. J.: Adrenocortical Function in Obesity, J. Clin. Endocrinol. and Metab. 19:344, 1959.
48. Hofstatter, L., and Ackerman, P. G.: Nitrogen Balance Studies in Elderly Men, J. Gerontol. 6:20, 1951.

85 Per Cent

It is often stated that a high percentage of patients visiting the doctor's office do not have organic disease. This is true. The exact figure is unknown. It may be 15 per cent or 85 per cent. Those of us who see several patients each day recognize that many of their problems are not related to disease entities. However, these people suffer as much, perhaps more, than those with obvious ailments. They are tortured by their anxieties, fears, frustrations, etc. They come to us for help. Our problem is to separate the mental from the physical. This is not an easy job. The histories given and the symptom complexes presented mimic exactly those arising from organic problems. Many times we have to resort to laboratory and x-rays for the diagnosis. The process becomes one of exclusion. Making this fundamental decision is basic.

Once we have decided a given case is a nervous or anxiety problem, then we should be definite in the way we handle the case. For example, if we are dealing with an anxiety headache, we should face up to the situation and not carry it along as some vague physical cause. This is contrary, usually, to what the patient wants. The patient seldom wants to admit a nervous cause for his problem and is much happier if an organic explanation is given.

As general doctors, internists, and personal physicians, we should be able to diagnose and recognize the many nervous problems that come to us. The psychiatrists tell us that in many instances we handle these problems better than they do. If we do accept these people for treatment, we should be qualified to treat them intelligently and according to recognized standards for nervous ailments. We should know our limitations and quickly refer those cases requiring specialized care.—Westchester Medical Bulletin.

Complicated Pelvic Fractures*†

(With Case Reports)

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This is a discussion of fourteen complicated pelvic injuries of a total of 108 cases of pelvic fracture treated during the five-year interval between 1954 and 1959, at Charleston General Hospital. They include pelvic fractures combined with genito-urinary, intra-abdominal, chest and head injuries.

The pelvic cage is meant to protect the lower abdominal viscera and transmit weight from the trunk to the inferior extremities. "Within its borders are housed a portion of the urinary and intestinal systems and the female genitalia; through its foramina pass the great nerve trunks and blood vessels, while beneath its arches passes all mankind, with few exceptions, the most notable, Julius Caesar."

Force great enough to fracture any of the pelvic bones may also cause injury to some part of the genito-urinary tract. Pelvic fracture occurs in crushing automobile and mine accidents, falls from ladders, or as a result of direct application of force to the perineum.

Classification

Fracture of the pelvis may be classified as follows:

A. Pelvic ring
   1. Superior or inferior pubic ramus, or both, unilateral or bilateral.
   2. Diastasis of symphysis pubis.
   3. Associated with No. 1 or No. 2, fracture through ilium or sacrum on same or opposite side, or sacroiliac dislocation.

B. Acetabulum
   1. Rim, with posterior or anterior dislocation of hip.
   2. Floor, with varying degrees of central dislocation of hip.

C. Isolated fractures
   1. Avulsion
      a. Anterior inferior spine by rectus femoris.
      b. Anterior superior spine by sartorius.
      c. Ischial attachment of the hamstrings.
   2. Direct trauma to wing of ilium.

D. Sacrum and coccyx

*Presented by Doctor Chang before the annual meeting of the West Virginia Chapter, American College of Surgeons, at The Greenbrier in White Sulphur Springs, April 1-2, 1960. This paper was awarded first prize among those presented by residents from hospitals throughout the state.

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Associated injuries of pelvic fractures are classified as follows:

A. Visceral damage
   1. Urethra.
   2. Bladder, intraperitoneal or extraperitoneal rupture.
   3. Rectum.

B. Nerve damage, injuries of lumbosacral plexus characterized by toe drop and loss of Achilles' reflex.

The patient with severe to moderately severe, crushing pelvic injury presents a picture of shock of varying degree. Visible deformity often is not present. The patient may complain of severe pain in the region of the symphysis pubis, perineum, ala of the ilium or in the low back. The pain usually is increased if pressure is applied to the region of the greater trochanters. Possible pelvic fracture may be indicated by fullness and tenderness in the lower abdomen. Ecchymosis may be visible over this area after a few hours to a few days, especially in the perineal region, and ileus is a frequent later complication.

Diagnosis and Treatment

In making an immediate working diagnosis, the history of the injury is of prime importance. The important facts are: the mechanism of the accident, where and when the pain was first noted, its severity and the incapacity it imposed, and the character, development and spread of the pain. X-rays confirm or deny the diagnosis and show displacement of fragments.

After shock has been controlled, early treatment usually consists of bed rest, compression

and the application of cold. Such therapy limits further damage and relieves pain. Many authors feel that the patient may be placed on a firm mattress supported by fracture boards except in cases of diastasis of the symphysis pubis, when the sagging of the unsupported mattress is said to assist reduction of displacement. We feel that in all such cases, the patient may be better treated with a pelvic sling.

In cases in which there is muscle avulsion or other bony displacement, anatomical apposition is not necessary and the patient is treated conservatively by rest in bed for six weeks with the responsible muscles in relaxed position, with pelvic sling. This is followed by application of a lumbosacral corset. Ambulation is allowed with crutches.

Isolated fracture of the pelvic ring usually is uncomplicated. Displacement of any importance is impossible unless the ring is broken in two places. We prefer to treat these fractures with a pelvic sling, followed by a lumbosacral corset.

Fracture of the sacrum is rare but, when it occurs, requires treatment with pelvic sling followed by lumbosacral corset. The coccyx also may be injured. Sometimes these fractures require surgical removal of the coccyx.

Even in multiple comminuted fractures of the pelvic ring, we feel that bed rest with a pelvic sling is all that is necessary.

In anteroposterior compression fracture, with or without shearing force, there may be pubic separation with sacroiliac joint or sacral injury. One half of the pelvis may be displaced upward. In these cases, we employ pelvic sling plus skin or skeletal traction to the affected leg. Another method, and one advocated by Watson-Jones, is the application of a plaster cast with the patient in the lateral position.

Visceral damage associated with pelvic fracture requires prompt and adequate treatment.

Rupture of Urethra

Rupture of the urethra may occur with or without rupture of the bladder. The prostatic and membranous portions of the urethra are particularly prone to injury when there are fractures of the bony pelvis. The bulbous urethra is more directly related to straddle injuries. Rupture of the membranous urethra usually is associated with pubic and ischial injuries. In the case of lateral compression pelvic fracture, the bone fragment may directly rupture the urethra or the bladder. Anterior compression may cause separation of the symphysis and may be followed by stretching and tearing of the urethra. When the membranous urethra is torn, the pudendal vessels often are torn along with the posterior layer of the triangular ligament, and may cause extensive hemorrhage into the prevesical space.

The clinical picture of urethral injury varies with the extent and degree or site of the bony pelvis injury. The patient may be in shock or may have lower abdominal pain. With urethral rupture, there may be slight but constant urethral bleeding from the meatus, with or without severe perineal pain. There may or may not be interference with urination. Examination of the perineum may show slight swelling or none. Fracture of the pubic bones may be palpated if there is displacement. It is important to find out whether urine has been passed since the accident. If it has not, a drop of blood may be seen at the meatus or expressed by massage along the urethra from the perineum. The bladder may be greatly distended or urine may have been extravasated through the urethral wound into the tissues of the perineum, penis, scrotum or anterior abdominal wall. If the urethral tear is complete, the bladder may be palpated as a separate mass. Rectal examination may show upward displacement of the prostate and the rectum may be slightly compressed by a soft, bulging mass in the pelvis, indicating that the prostate gland and bladder have been torn loose and displaced upward.

In any probable fractured pelvis a catheter should be passed immediately, and the urine examined for gross or microscopic blood.

Rectal examination may reveal swelling of the anterior rectal wall due to extravasated blood and urine.

X-rays will show not only the type of fracture, but the placement of the catheter and distention of the bladder. Urethrocystogram should be done early to confirm a suspected ruptured urethra. In a complete rupture, the urethrocystogram may show a distorted, high-lying bladder. These complications require immediate surgical attention.

A suprapubic incision is made and two-way drainage established with a retention catheter in the bladder and a Foley or similar catheter in the urethra. If the patient's condition permits, the site of the rupture in the perineum should be exposed, the torn ends of the urethra identified, and end-to-end anastomosis of the urethra over a bag catheter performed. It is possible that a ruptured urethra will require periodic dilatation throughout the patient's life.

Crushing Injuries

In crushing injuries, the pubic symphysis may be suddenly and violently separated, tearing the bladder neck from its ligamentous moorings to

the pubis and pelvis. The symphysis pubis may snap back into place so that the separation is not suspected. The bladder may be perforated by a spicule of bone, with the perforation extraperitoneal, below its peritoneal reflection.

In these injuries a spicule of bone may also perforate the rectum, requiring laparotomy and repair. Local drainage, proximal colostomy and antibiotics are associated measures.

In pelvic fracture with one or more of these associated injuries, delayed treatment increases morbidity and mortality. As early as possible, the patient is encouraged to begin hip motion in order to avoid stiffness. In severely comminuted fracture, there may be peroneal nerve paralysis requiring stabilization of the ankle. Another common complication is thrombophlebitis, which usually is self-limiting.

Late Complications

Late complications of pelvic fracture are: (1) Malunion, with interference in parturition in female patients, (2) Traumatic arthritis of the hip, (3) Osteomyelitis following extravasation of urine, (4) Sacroiliac pain, (5) Traumatic urethral stricture, (6) Coccydynia, and (7) Residual diastasis of symphysis resulting in some disability.

Review of Cases with Complicating Injuries

Of the 102 pelvic fractures reviewed, 88 were simple fractures and 14, or about 14 per cent, had associated visceral damage or other accompanying injury. Average duration of hospital stay was 35 days.

At one time, most pelvic fractures seen in this area were due to mine accidents, but in this group 75 per cent of all pelvic fractures and 79 per cent of complicated pelvic fractures were caused by car accidents. In the cases covered in this review there were 45 male patients and 67 female patients.

The causes of injury were as follows:

1. Car accidents, 84.
2. Coal mine accidents, 14.
3. Accidents from other causes, 4.

Analysis of 14 Cases

Among the 14 cases with complicating injuries the following break-down was noted:

1. Sex: 12 male, 2 female (6:1).
2. Average age: 46.3 years.
3. Race: 13 white, 1 colored (13:1).
4. Cause of injury: 10 car accidents; 2 coal mine accidents; 1 construction accident; 1 iron metal company accident.
5. Type of pelvic fracture:
   - A. Pelvic ring
     - (1) Superior and inferior pubic rami
       - a. Unilateral – 9
       - b. Bilateral – 2
     - (2) Diastasis of symphysis – 4
     - (3) Associated with fractured ilium – 4
     - (4) Associated with fractured sacrum – 2
     - (5) Associated with extending fracture of sacroiliac joint and lumbosacral joint – 1
6. Associated injuries:
   - A. Visceral damage
     - (1) Ruptured urethra – 3
     - (2) Ruptured bladder
       - a. Extraperitoneal – 3
       - b. Intraperitoneal – 0
   - B. Nerve damage:
     - (1) Lumbosacral plexus – 1
     - (2) S-1, 2 – 1
   - C. Severe paralytic ileus – 5
7. Chest complications:
   - A. Pneumothorax – 2
   - B. Esophageal and diaphragmatic rupture (expired) – 1
8. Head injuries:
   - A. Skull fracture – 1
   - B. Cerebral concussion – 4
9. Intra-abdominal hemorrhage – 1
10. Other complicated fractures:
    - A. Tibia and fibula – 4
    - B. Femur – 2
    - C. Humerus – 3
    - D. Scapula – 1
11. Progress:
    - A. Working – 2
    - B. Walking – 9
    - C. Total disability – 0
    - D. Expired – 2
    - E. Unknown – 1
12. Average duration of admission – 38 days

Case Reports

The following are representative cases taken from this series:

Case 1.—A thirty-four-year-old white male was admitted following an accident in which he was struck in the posterior region of the pelvis by a large pipe. Examination revealed a crushed pelvis with a comminuted fracture of the pelvic bone, ruptured urethra and rectum. There was complete protrusion of the anus with much maceration. It was felt that the sciatic nerve on the right side was not involved since there was motion of the right leg. X-rays showed upward dislocation of the right innominate bone and a fracture of the left pubis with rotation and separation of the fragment from the symphysis. The urethrogram showed extravasation of dye, representing a ruptured posterior membranous urethra. After shock therapy, suprapubic cystotomy with repair of the ruptured posterior urethra and sigmoid colostomy were performed. The procedure was fairly well tolerated (Case 1, Figures 1, 2).

After surgery a pelvic sling with thirty pounds weight and Buck's traction with eight pounds weight to the right leg were applied. Antibiotics, fluids and electrolytes were given. Severe ileus was present. Gastric intubation with continuous suction and prostigmin were tried.

The patient's condition declined, with high fever, mental confusion and no improvement in the ileus. Fifteen days after admission there was sudden collapse in blood pressure, and the patient expired twenty-four hours later. Death appeared to be due to pulmonary embolism. Permission for autopsy was not obtained.

Case 2.—A fifty-year-old white coal miner was admitted with a severe crushing injury of the pelvis. He had been involved in an accident in which a heavy piece of earth-moving equipment rolled over his pelvis.

On admission, he was in severe shock and immediate shock therapy was instituted. Because of his general condition, portable x-rays were taken and these showed a comminuted fracture of the left pelvic bone with a fracture through the body of the pubis and through the inferior ramus (Case 2, Figure 3).

A catheter was placed in the urethra, in the emergency room; we could feel the balloon of the Foley catheter presenting in the area of the prostate. There did not appear to be any involvement of the rectum, on rectal examination. There was a hematoma about the size of a football in the right groin and it was our impression before operation that he had either ruptured a large iliac blood vessel or possibly even the iliac artery itself. The hematoma had dissected completely across the abdominal wall and the entire subcutaneous space on his left abdomen and side was filled with approximately two liters of blood. Because of his poor general condition, we did not do a urethrogram as it was our feeling that we should get him into the operating room as soon as possible to ligate whatever blood vessels were ruptured.

The patient was taken to the operating room and a midline incision was made from the symphysis pubis upward to the umbilicus. The peritoneum was pulled upward and blood, approximately 700 cc. to 800 cc., was evacuated from the perivesical space and the right iliac fossa. The prostate was lying free underneath the rectus fascia and the torn end of the urethra was attached to it, as was the right seminal vesicle. There was a large rent in the iliac vein. Just about every major branch of the iliac artery had been completely torn loose; all of these were ligated. There was no ureteral injury. A catheter was then placed in the bladder and the bladder neck pulled down to its normal position. The bladder was closed around a mushroom cystotomy tube and large drains were placed in the region around the bladder.

The patient left the operating room in relatively good condition. He received eight pints of blood from the time he was admitted to the hospital until the time he left the operating room.

He was placed in a pelvic sling for treatment of the fractured pelvis. His general condition seemed fairly good, although the urine output never did come up to normal, and by October 18, 1959, there was complete shutdown of the kidney, with no urine output. The B. U. N. was 229 mg. At this time, the patient was transferred to another institution, to be placed on an artificial kidney.

At the present time, he is still hospitalized. His general condition is poor. He has multiple urinary fistulas in the perineal area, and multiple large decubital ulcers in the sacral area and

Case 1—Figure 1

Case 1—Figure 2

greater trochanter areas of both hips. His red blood count and hemoglobin remain low. X-ray shows the fractures of the pelvis to be healed, with considerable deformity. It is felt that if his general condition can be improved, the ileum can be used as a bladder and opened onto the abdomen.

Case 3.—A twenty-five-year-old white male was admitted following a car accident in which he sustained injuries of the pelvis, abdomen and skull. He had been unconscious for a few seconds. On admission, he was conscious and complaining of severe lower abdominal pain and tenderness and completely limited hip motion. Examination showed abrasions over the right upper abdomen and right lower quadrant, with tenderness to palpation and generalized muscle guarding. Urethrogram and cystogram did not show any extravasation.

X-rays of the pelvis revealed a fracture of the inferior and superior rami of the right and left

Case 2—Figure 3

pubic bones, with downward displacement of the medial portion of the pubis on each side with over-riding. An intravenous pyelogram was negative.

After shock therapy, a pelvic sling was applied; Wangensteen suction and transfusion were started. On the following day, hemoglobin and hematocrit dropped, and a portable x-ray of the abdomen showed fluid in the peritoneal space. There was no evidence of air, but there was some gas in the small and large bowels. Suspecting injury of the liver or spleen, an exploratory laparotomy was performed. A large amount of liquid and clotted blood was found as soon as the peritoneum was opened. There was rather extensive peritoneal bleeding in the right upper quadrant, extending down the right lateral gutter, and a large hematoma was found around the right kidney, with tearing of the posterior parietal peritoneum of the right upper abdomen and free continuous oozing of blood into the peritoneal cavity. Further exploration revealed an extensive hematoma and oozing along the gastrohepatic ligament extending up behind the right lobe of the liver. Hemostasis and drainage of the right upper quadrant were effected.

Following surgery, the patient's condition was complicated by pneumonitis and unexplained fever from which he gradually recovered. The pelvic fracture was treated with a pelvic sling for five weeks. Some peroneal nerve weakness developed. X-rays showed good callus formation and the patient was discharged with a lumbosacral corset, after forty-six days. He has been followed in the Outpatient Clinic, and was seen last on December 10, 1959. He was walking with some limp, using a cane.

Case 4.—A fifty-five-year-old white male was admitted following an automobile accident, complaining of pain in the left upper chest, pelvis and left shoulder.

Examination revealed pain to pressure over the pelvis. There was moderate pain in the left shoulder, on motion, and pain on pressure over the first and second costal cartilages. X-rays of the ribs, skull, left shoulder, left knee and lumbosacral spine were negative for fracture. X-rays of the pelvis showed a fracture of the left pubic bone.

Paralytic ileus with abdominal distention developed, with nausea and pain in the abdomen. The ileus was treated by Wangensteen suction and prostigmin.

The pelvic fracture was treated conservatively with bed rest in a pelvic sling. He improved on this therapy, and was discharged from the hospital after forty-two days. He was fitted with a lumbosacral corset. He is able to work. (Case 4, Figure 4).

Case 5.—A thirty-one-year-old white male was admitted in severe shock following an automobile accident. He was bleeding profusely from the right leg and the urethra. Immediate shock therapy was given.

X-rays of the pelvis showed a comminuted fracture of the anterior and superior rami on the right and a large chip fracture of the right portion of the symphysis pubis. There was a diagonal fracture extending from the inferior portion of the right sacroiliac joint superiorly and diagonally to the fifth lumbosacral segment. There was a small chip fracture from the right transverse process of the fifth lumbar segment. There was subcutaneous emphysema in both thighs and gluteal regions.

Case 4—Figure 4

X-rays of the right leg showed a comminuted, compound fracture of the right tibia with lateral displacement of the middle fragment and overriding and medial bowing of the shaft fragments. There was also a comminuted fracture of the middle portion of the fibula. Urethogram showed a large amount of air in the pelvis, extending into the subcutaneous tissue of each thigh. The dye was distributed through the soft tissue of the perineum and then passed into the rectum. The subcutaneous emphysema appeared to be coming from the rather large amount of air in the pelvis. A cystogram revealed marked extravasation.

Transfusion was given, and the site of the fracture of the right leg was cleaned. The fragments were reduced and cast was applied. A ruptured bladder and laceration of the membranous urethra were found and repaired (Case 5, Figures 5, 6, 7).

The pelvic fracture was treated with bed rest in a pelvic sling. The patient was discharged from the hospital after three months. He was ambulatory.

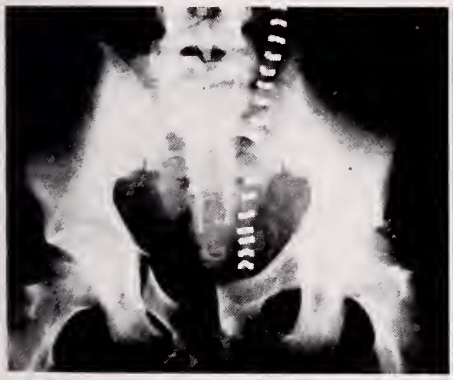
Case 6.—A thirty-two-year-old-male was admitted after an accident in which he was struck by a bale of aluminum coil weighing approximately one thousand pounds. He complained of severe pain in the pelvic region and lower abdomen, was passing blood from the external meatus, and was in shock.

X-rays showed a comminuted fracture of the superior and inferior rami of the pubis on each side. There was also a fracture through the iliac bone on the left, extending into the sacroiliac joint on the left. There was some inferior displacement of the fragments of the pubic bone.

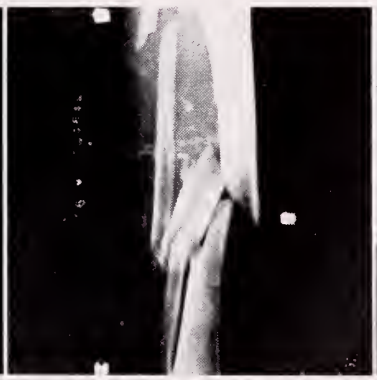
The urethrogram showed extravasation of dye from the region of the membranous urethra, and none of the dye passed into the bladder, giving the appearance of a ruptured urethra with hemorrhage. Surgery revealed a large hemorrhage in the space of Retzius. The bladder was incised and showed a relatively large amount of old, clotted blood. By insertion of the index finger through the cystostomy opening, it was possible to identify the sound placed through the urethra, showing a complete rupture. The sound was then directed into the bladder. A small rubber catheter was fastened to the sound and put through the urethra. A 324 French Foley catheter was tied to this catheter and drawn in a retrograde manner back into the bladder. The Foley was then filled with 30 cc. of water and placed at the apex of the bladder which was pulled down approximating the tear in the urethra. A large #20 French mushroom cystostomy tube was then placed in the bladder and the wound was closed. A large drain was placed in the space of Retzius and the rectus fascia was closed. Catheters were irrigated and the irrigation was almost clear (Case 6, Figures 8, 9).

The patient was treated with a pelvic sling and his condition gradually improved. The catheter was removed after about twenty-five days.

X-rays at five weeks showed the pelvic fragments remaining in good position, with evidence of healing. Improvement continued and the



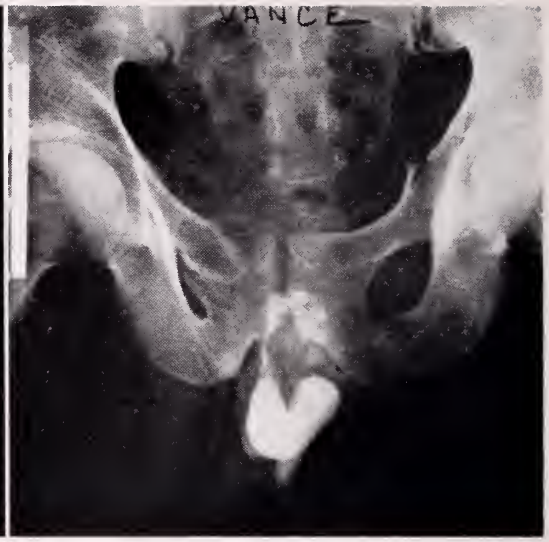
Case 5—Figure 5



Case 5—Figure 6

Case 5—Figure 7

Case 6—Figure 8



Case 6—Figure 9

patient was discharged from the hospital two months after the accident.

After five months the suprapubic bladder wound was completely healed, with no urinary symptoms. A #22 French sound passed into the bladder with ease, and the urine was negative. The patient was doing household work with a brace, but still experienced minimal pain in the left pelvic region. He walked fairly well, but had some involuntary micturition occasionally.

Case 7.—A fifty-year-old white female was admitted in severe shock after being struck by an automobile.

X-rays of the pelvis showed a fracture of the left pubic bone, with the superior and inferior rami involved, and slight separation of the fragments. There also appeared to be a small fracture through the inferior ramus of the right pubic bone.

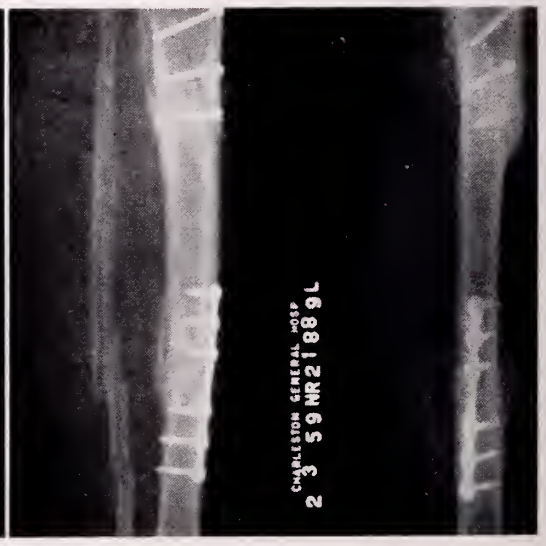
X-rays of the shoulder showed a fracture of the right scapula involving the area just below the glenoid, and the glenoid appeared to be slightly displaced.

There was a comminuted double fracture of the tibia with medial displacement and overriding of the fragments. There was a double fracture of the fibula.

There were also intra-abdominal injuries and it was later found that the patient had suffered retroperitoneal hemorrhage without any organ rupture.

After recovery from shock, the fracture of the left leg was treated by closed reduction and ap-

Case 7—Figure 10



Case 7—Figure 11

plication of cast. A pelvic sling was applied with twenty-five pounds weight.

Thrombophlebitis of the leg developed and subsequent minor pulmonary emboli.

Six weeks later open reduction of both fracture levels of the left leg was necessary, with internal fixation and bone graft. Recovery was uneventful. (Case 7, Figures 10, 11).

Since this patient was beyond child-bearing age, bony deformity of the pelvis was not considered important. No further treatment was considered necessary.

Case 8—A 34-year-old-white male, injured in a car accident, was brought to the Charleston General Hospital complaining of severe pain in the left hip region. Examination showed no blood in the urine.

X-rays showed a fracture of the left hip, right pubis and transverse processes of the lumbar spine.

The hip was nailed with a Smith-Petersen nail and side plate. The fractured pelvis was treated with a pelvic sling (Case 8, Figures 12, 13).

The patient was ambulatory, using crutches, in six weeks.

Case 9.—A 40-year-old-white female was admitted following an automobile accident, complaining of severe pain in the pelvic region and lower abdomen. She was passing blood from the urethra and was in shock.

X-rays showed multiple fractures of the pelvis with fractures through both pubic bones and ischium. There was a moderate amount of displacement inferiorly with some spreading. There was separation of the left sacroiliac joint of approximately ½ inch. There was a fracture through the 1st, 2nd, and 3rd segments of the sacrum.

X-rays of the left humerus showed a transverse fracture through the middle third with shortening and medial displacement of the distal fragment.

X-rays of the right shoulder showed a fracture through the lateral angle of the right scapula extending into the joint space.

X-rays of the face showed a fracture of the zygoma on the right (Case 9, Figures 14, 15, 16).

The urethrocystogram showed marked extravasation of dye in the pelvis outside the bladder, giving the appearance of a ruptured bladder.

After shock therapy the patient was taken to the operating room and a midline incision was made from the symphysis pubis upward to the umbilicus. The bladder was ruptured at several points by fracture fragments of the pelvis. There was no ureteral nor urethral injuries. The bladder was closed around a suprapubic cystostomy tube. Following this, a catheter was placed in the urethra into the bladder. A large drain was placed in the space of Retzius.

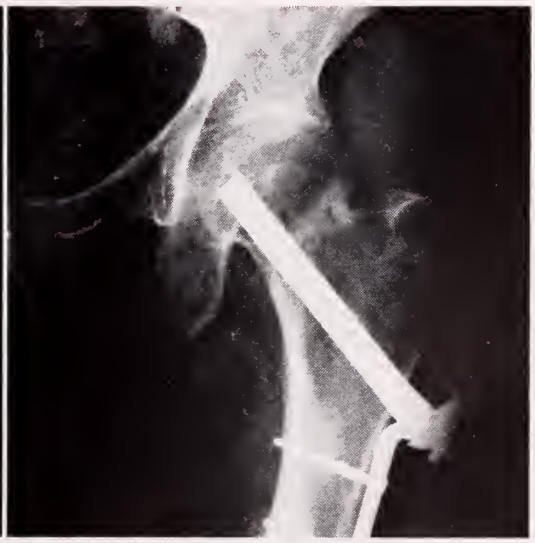
Several days later, open reduction of left humerus with plate fixation and open reduction of the zygomatic fracture was performed.

The pelvic fracture was treated with bed rest in pelvic sling. The patient was discharged from the hospital after four months. She was fitted with a lumbosacral corset. She is able to walk.

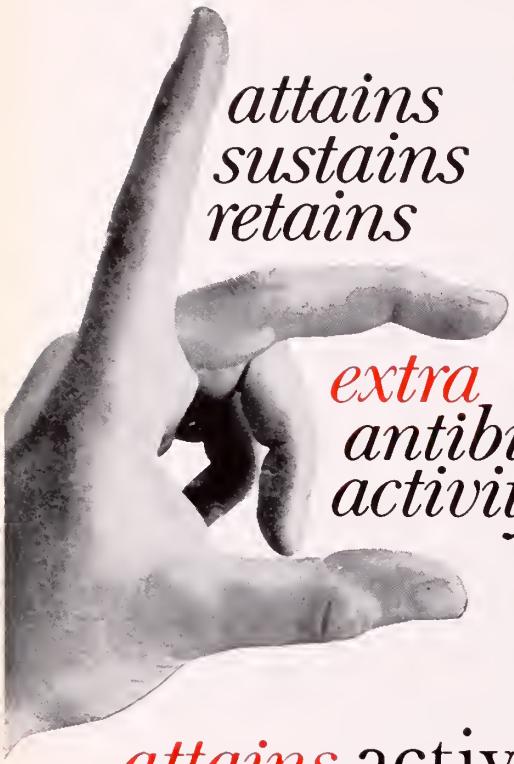
Conclusions

The treatment of fracture of the pelvis itself is relatively simple. It is the concomitant in-

Case 8—Figure 12



Case 8—Figure 13



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extra
antibiotic
activity

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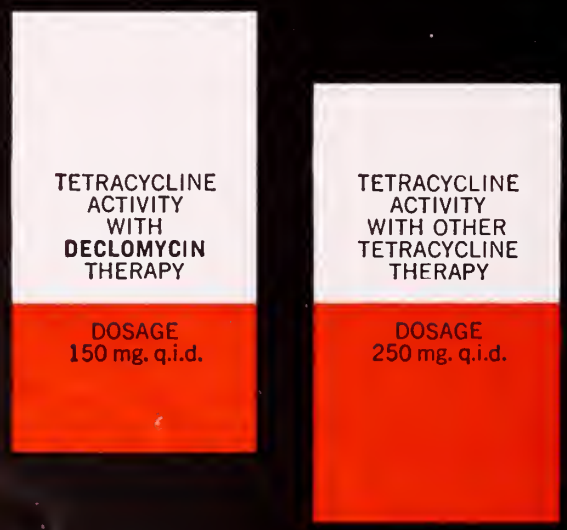
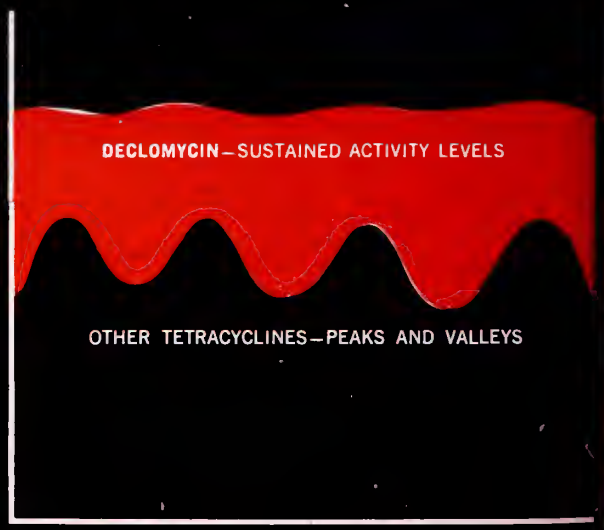
sustains activity levels evenly

DECLOMYCIN Demethylchlortetracycline sustains through the entire therapeutic course, the high activity levels needed to control the primary infection and to check secondary infection at the original—or a another—site. This combined action is usually sustained without the pronounced hour-to-hour, dose-to dose, peak-and-valley fluctuations which characterize other tetracyclines.



POSITIVE ANTIBACTERIAL ACTION



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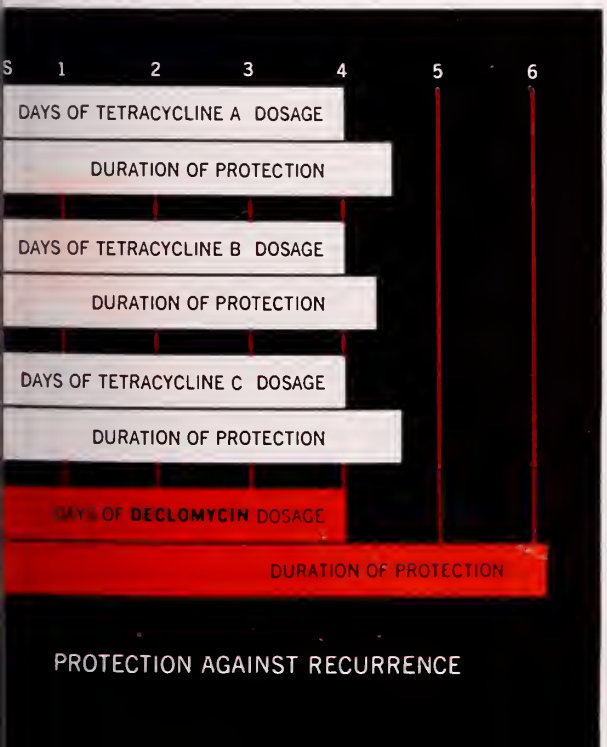

CAPSULES, 150 mg., bottles of 16 and 100. **Dosage:** Average infections—1 capsule four times daily. Severe infections—Initial dose of 2 capsules, then 1 capsule every six hours.

PEDIATRIC DROPS, 60 mg./cc. in 10 cc. bottle with calibrated, plastic dropper. **Dosage:** 1 to 2 drops (3 to 6 mg.) per pound body weight per day—divided into 4 doses.

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PRECAUTIONS—As with other antibiotics, DECLOMYCIN may occasionally give rise to glossitis, stomatitis, proctitis, nausea, diarrhea, vaginitis or dermatitis. A photodynamic reaction to sunlight has been observed in a few patients on DECLOMYCIN. Although reversible by discontinuing therapy, patients should avoid exposure to intense sunlight. If adverse reaction or idiosyncrasy occurs, discontinue medication.

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Case 9—Figure 14

Case 9—Figure 15

Case 9—Figure 16

juries which complicate the patient care. We feel that the problem is compound in geometric rather than in arithmetical progression when there are multiple injuries.

Treatment of head and chest injuries must take precedence over abdominal injuries, and treatment of abdominal injuries, including those of the genito-urinary tract, certainly must take precedence over bony pelvic injury.

Following the suggestions of some workers, open reduction and fixation of fracture fragments by wires or application of hip spica cast were formerly employed. It was our experience that cases so treated resulted in stiffness in the hip region and that satisfactory hip mobility was never regained.

We now feel that the treatment of choice is the use of the pelvic sling for a period of 3-6 weeks, depending upon the type of fracture. Patients are encouraged to exercise their hips as soon and as much as pain allows. The frequent complications of ileus and phlebitis can be evaluated and treated in the accepted manner with the patient in a pelvic sling. In the absence of complications, patients are able to obtain 50°-60° hip flexion, without pain, in 7-14 days, regardless of bony deformities. After 3-6 weeks in the sling, patients are allowed out of bed with crutches and corset.

The majority of patients treated in this manner have practically normal, painless hip motion. In order to obtain satisfactory results in cases of multiple injuries, the closest cooperation of the various services of the hospital is paramount.

References

1. Reno, J. H.: Athletic Injuries of the Pelvis, Hip and Thigh, Am. J. Surg., (Sept.) 1959, p. 451.
2. Douglas, L.: Early Care of the Injured, Surg. Clin. North America 36:1191 (Oct.) 1956.
3. Baker, W. J. & Graf, E. C.: Management of Urinary Tract Injuries in Fractures of the Bony Pelvis, Surg. Clin. North America (Feb.) 1955, p. 295.
4. O'Dell, M. H.: Traumatic Rupture of the Membranous Urethra, The West Virginia Medical Journal (Aug.) 1949, p. 212.
5. Moseley, H. F.: Fractures and Other Disorders of the Lower Extremities, Textbook of Surgery, C. V. Mosby Company, ed. 3, p. 1136.
6. Kirwin, T. J.: Emergencies in Urologic Surgery, Surg. Clin. North America (April) 1955, p. 497.

Coffee Breakfast and Coffee Breaks

There are those who like to start the day well fortified by a substantial amount of fuel derived from a good breakfast. There are others who gulp a cup of coffee and call it quits. The latter class has always seemed queer to one with a healthy appetite. Perhaps it counts on an early snack in the morning break which seems to be obligatory in most activities.

Studies of work capacity of people who have no breakfast but indulge in the mid-morning break, providing miscellaneous food, indicate that the performance of these people is significantly less efficient than that of others who eat a conventional breakfast. Maybe this weakens the argument for the numerous breaks now considered essential by many workers. The time seems to be coming when the breaks will be for work rather than refreshment.

Please pass the ham and eggs.—Journal, South Carolina Medical Association.

An Unusual Type of Internal Hernia Causing Intestinal Obstruction

(Case Report)

Jack W. Hunter, M. D., and George E. Farrell, M. D.

In a series of 335 cases of intestinal obstruction, McIver[1] reported that the causative factor was internal hernia in only 0.9 per cent, or 3 cases. While this incidence is low, the possibility of gangrene is such that the diagnosis should always be considered.

A case in which there was an unusual complication of the Baldy-Webster[2] uterine suspension operation is reported in this paper. The operation had been performed for the cure of marked retrodisplacement of the uterus. In this procedure the round or uterosacral ligaments are grasped at a point about one-third the length of the ligament from the uterine end and are drawn through an opening in the broad ligament toward the posterior wall of the uterus. The loops of the round ligament are then sutured together and attached to the posterior surface of the uterus. In the present case, the right round ligament had become detached and a loop of small bowel had slipped between it and the fundus of the uterus.

Case Report

O. C., a 39-year-old white female office worker, was admitted to the Webster County Memorial Hospital on November 2, 1957, with the chief complaint of abdominal pain and vomiting. The pain was of sudden onset, severe and cutting, and most marked in the right lower quadrant. It was so severe that the patient found it necessary to flex her hips in order to obtain minimal relief. Vomiting had begun with the onset of pain and continued until admission.

Physical examination revealed increased peristaltic sounds in the upper and lower abdomen but more prominent in the lower abdomen. There was marked tenderness throughout the entire lower abdomen.

Past history revealed that the patient had had pelvic surgery at another hospital six years prior to admission. We were unable to determine the exact type at the time.

Submitted to the Publication Committee, September 6, 1960.

The Authors

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Laboratory report: There was a moderate leucocytosis, with a normal differential.

X-ray findings: A flat film of the abdomen showed rather poorly defined density within the pelvis extending into the abdominal cavity. The upper border of this density was ill-defined.

Figure 1. There is a poorly defined area of density in the pelvis extending upward into the abdominal cavity. There are multiple dilated parallel loops of jejunum above this. Impression: Possible pelvic mass with small bowel obstruction.

There were several parallel dilated loops of small bowel above this density with fluid levels. An emergency barium enema was performed and there was smooth narrowing of a long segment of sigmoid colon. The mucosa was intact. This was interpreted as consistent with extrinsic pressure. X-ray diagnosis was ". . . pelvic mass with small bowel obstruction."

Surgery was performed promptly. On opening the abdominal cavity, a considerable amount of straw-colored fluid was visualized. It was then discovered that the right round ligament had become detached where a Baldy-Webster uterine suspension operation had been performed previously. An approximate 3 foot length of jejunum had slipped through the opening between the right round ligament and the fundus of the uterus, beginning inferiorly and extending superiorly. It had become twisted and an approximate 15 inch length was completely gangrenous. The small bowel proximal to this was obstructed. The ligament was incised and the large hernia reduced. The gangrenous bowel was resected. An end-to-end anastomosis was performed. The round ligament was repaired and sutured to the posterior wall of the fundus of the uterus.

Figure 2. There is narrowing of a large segment of sigmoid. This was interpreted as due to extrinsic pressure.

The resected jejunum was sent to R. W. Hoffman, M. D., pathologist, at Columbus, Ohio, who reported that the intestine was gangrenous. The patient recovered uneventfully from the surgical procedure and was discharged on November 20, 1957.

Discussion

Internal hernia as a cause of intestinal obstruction is rare. The case presented demonstrates a very rare type of internal hernia, with gangrenous jejunum. The patient recovered and is working and in good health at the present time.

References

1. McIver, M. A.: Am. J. Surg. 19:581-596, 1953.
2. Baldy, J. M.: New York. M. J. 78:167, 1903.

Aged Need Additional 'Learning Time'

We are all familiar with the old adage, "You can't teach an old dog new tricks." It is apparently true that from about the fifties onward, attempts to adapt to new conditions of performance and new types of stimulation are likely to require a relatively longer learning stage than before.

Although reaction time may be an important factor in learning new skills or in carrying out learned acts effectively, in recent experiments by various investigators it has appeared that perhaps this is not the most significant element in the picture. These tests seem to indicate that it is the resting or recovery time following a reaction which is the important factor.

One of the characteristic features of the aging person is that he does not recover as rapidly following a reaction as he did when he was younger. He needs a longer rest period to be ready for the next stimulus than he did in earlier years. Recognition and acceptance of this fact can help us change our attitudes toward what we expect from older people in situations which require of them readjustment or readaptation—in other words, in situations which require new learning.

The learning process of the older person must take place in a different manner from that of a younger person. He must be given more time in which to recover between each completed action and the next following stimulus for a succeeding action. This does not mean, however, that we need necessarily expect any lesser ultimate capacity from the older person in areas for which he has the necessary experience, basic intelligence and physical capacity.—James N. Sussex, M. D., in Journal, Med. Assn., State of Alabama.

Current Experience with Cobalt-60 Radiation Therapy*

Mark H. Wholey, M. D., E. W. Squire, M. D., and Paul Francke, Jr., M. D.

In 1951, the first radioactive cobalt-60 beam-directed therapy unit was installed at the University Hospital in Saskatoon, Saskatchewan. Since that time numerous other cobalt units have been designed and placed in operation in centers throughout the world.

In those early days, the cobalt unit had certain physical limitations that have undergone constant improvement resulting in more precise tumor treatment. Initial enthusiasm was exaggerated, especially by the lay press, and this resulted in uninformed stretching of the imagination on the performance of the "miracle" isotope. Many incurable patients made needless and expensive trips for cobalt therapy that presently could be avoided. Experience from these early years has provided us with a firm foundation, both of the advantages and limitations of this modality of treatment.

Radioactive cobalt-60 emits two gamma rays with energies of 1.1 and 1.3 MEV (million electron volts). These two gamma rays are the basis of all cobalt teletherapy. The weak beta particles also emitted are filtered out.

Established Advantages

With a better understanding of this supervoltage, high energy radiation, certain advantages are now well established.

(1) Skin sparing effect: With conventional x-ray therapy from .250 MEV units the maximal ionization occurs on the surface of the skin and consequently the skin reaction may be marked in high dose tumor therapy.

In contrast the energetic secondary electrons produced from the cobalt-60 gamma rays have their maximal ionization about 5 mm. below the surface of the skin. Surface reaction is thus avoided. This has allowed much higher tumor dosage to areas once considered limited because of unfavorable skin damage. It also provides treatment in many instances through single anatomical fields and eliminates complicated multiportal techniques. Because of this, an incurable lesion in and about the sacrum, whether it be a primary chordoma or recurrent rectal, cervical or ovarian carcinoma, is more easily palliated with super voltage therapy. This is also true for the nonresectable anaplastic carcinoma of the thyroid, lung, bladder and abdominal viscera.

(2) Increased depth dose: Because of the more energetic gamma rays the depth dose from cobalt-60 is greater than that from conventional therapy. This advantage has allowed delivery of a larger tumor dose to deep-seated lesions previously not possible unless numerous fields were utilized. This is of some importance in treating carcinoma of the endometrium, esophagus or lung to a cancerocidal level. In such high dose therapy careful planning is recommended to avoid unnecessary treatment to adjacent normal organs.

(3) Decreased bone absorption: Because of the physical properties of this high energy radiation, its method of absorption differs from conventional therapy. The preferential absorption by bone is not observed. This has allowed higher dosage to lesions of the head and neck such as the gingival sulci and tonsillar area and at the same time with less concern over radionecrosis to the mandible, maxilla or skull.

(4) Less side-scattered radiation: Again, because of the higher energy radiation and uniform beam the scattered radiation that occurs does so in a forward direction. Consequently, with less side-scattering there appears to be less radiation sickness and less unnecessary radiation to adja-

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cent organs. The volume or integral dose is also less.

Summarizing these advantages, then, cobalt therapy has allowed us to deliver a greater tumor dose through simple portals to deep-seated lesions without seriously affecting the skin and with less radiation sickness to the patient.

Limitations

The half-life of cobalt-60 is 5.3 years. The decay characteristic indicates that with time the radiation output decreases and periodic replacement of the source is necessary. Generally at the end of one half-life, or 5.3 years, the cobalt-60 source is replenished. Cobalt-60 equipment and protection requirements are considerably more expensive than those of conventional therapy.

In addition, cobalt-60 therapy is not suitable for intravaginal, intraoral or superficial skin cancers. Reduced usefulness is also present at long source to skin distances from excessive penumbra being present. Recent improvements in collimating systems have improved this latter limitation.

Present Results

Early reports are beginning to indicate that results of treatment of all carcinomas and especially of those in the oropharyngeal region have improved since the advent of supervoltage therapy. This is especially true for control of the primary lesion. When metastatic nodes are present, combined radiation followed by radical neck dissection is the more successful treatment.[1] Supervoltage radiation is also effective palliation against head and neck carcinomas recurring after surgery or previous conventional radiation.[2] Results for carcinoma of the larynx treated by radiation alone are comparable to those for surgery and in many series five-year survival for all stages is higher than that of surgery. Many series now report 50 per cent five-year survival for all stages and as high as 85 per cent for Stage I lesions confined to a mobile cord. When, however, complications of the laryngeal carcinoma such as subglottic extension and fixation, with edema, or spread to the arytenoids occur, radiation is generally not suitable for curative attempt. Surgery is preferable in these instances.

Cancer of the nasopharynx which may be either lymphoepithelioma, squamous cell epithelioma, or lymphosarcoma has a uniformly poor prognosis. There is a strong tendency to superior extension into the floor of the middle cranial fossa and subsequent cranial nerve involvement. Only 12 per cent survived five years in the series of cases reported by Scanlon.[3] The lymphosarcomas and lymphoepitheliomas when confined to the nasopharynx have a much better prognosis than the uniformly fatal squamous cell carcinomas. When metastasis to cervical nodes occurs, the treatment field should include both the primary lesion and the node-bearing area. Tumor dosage amounting to 5000-6000 rads protracted over a period of five to six weeks is acceptable.

Carcinoma in other sites and especially the pituitary, esophagus, and bladder is ideal for rotational therapy. In these instances the beam is rotated on an axis around the fixed tumor. With rotation there is considerable skin sparing advantages in addition to a marked drop off in the dose outside the cylindrical volume being treated. Consequently adjacent normal tissue is not affected. A protective absorber may be placed posteriorly or the controlled beam may be temporarily interrupted in its rotation over the spine to further reduce the dose to the spinal cord.

Future

Interesting avenues are being opened regarding the biologic behavior of different tumors. After all, cancer is a biologic problem and with a better understanding of cell physiology and defense mechanisms in the host, more effective combinations of therapy can be applied. Too often surgery and chemotherapy are used competitively with radiation when in reality they are complementary. Improved tissue culture methods[4,5,6,7] now provide us with media for directly observing the effect of radiation and chemotherapy on the genetic changes in individual cells.

Advances in chemotherapy with agents that may act synergistically with x-ray are under intensive study. The whole spectrum of actinomycins is being investigated. Actinomycin, originally discovered by Waksman, has been shown to cause tumor regression and act also as an effective radiation potentiator in certain neoplasms. Our concept of the actual tumor bed, and the importance of the underlying vasculoconnective tissue on the radiation response is being restudied in light of the work of Gray[8] and Churchill-Davidson[9] on the better response of tumors in an adequate oxygen concentration. It is possible that in tumors outgrowing their blood supplies anoxia and necrosis develop, and foci of resistant cells arise that do not respond to otherwise lethal radiation. Much remains to be learned about total body radiation and the effect on tumor behavior and the body host response.

Finally, the combined interstitial application of radioisotopes such as radiophosphorus (P-32),

radiogold (Au-198) and Iridium (Ir-192) directly into the tumor with additional external therapy has permitted more intensive dosage with encouraging results.

Conclusions

Improved methods of radiation therapy have been promising and presently effective cures can result only from this intelligent and cooperative approach to the entire cancer problem.

References

1. Am. J. Roentgenol. 81:375-401 (March) 1959.
2. Am. J. Roentgenol. 81:402-419 (March) 1959.
3. Ann. Otol., Rhin. and Laryng. 67:1005-1021 (Dec.) 1958.
4. Radiology 69:801-808 (Dec.) 1957.
5. Science 122:501-514 (Sept.) 1955.
6. Ann. New York Acad. Sc. 63:666-682 (March) 1956.
7. J. Exper. Med. 103:653-666 (May) 1956.
8. Brit. J. Radiol. 26:638-648 (Dec.) 1953.
9. Lancet 1:1091-1095 (May) 1955.

'Sixty Five'

It would appear that in the present scheme of things the age of sixty-five has become the preamble to the gates of paradise. It would seem that legislation in our country and in many western countries abroad, both locally and nationally, wherein forms of social security, or, similar old age benefits exist, has fostered in man the idea that the goal to which all men strive is to the golden age of sixty-five. At this time one ceases to contribute to society, except in isolated instances.

This is somewhat analogous to the ancient Persian desire of severing the Gordian Knot. Even though the latter is said to have been accomplished by Alexander the Great, one reads on with some concern and must eventually conclude that all did not end well with either the hero or those about him. That there has accrued benefits from putting our elders to pasture, one would be foolish to deny, however, that these benefits outweigh the debit side of the ledger there can be some doubt.

Present and past history lets us gaze with some insight into contributions made by people and peoples past the age of sixty-five. I dare say, the English would more than have looked askance at suggestions to retire Sir Winston Churchill, or, Elizabeth the First of England. The framers and founders of the constitution of our great country needed both the ideals and actions of the young and the elderly, for if we trace the ideals that later became ideals of action we find the young Mr. Jefferson's, Franklin's, and Adam's sustaining the action into ages well past sixty-five. Among the likes of philosophers we would have found Socrates early imbibing tranquilizers instead of hemlock. Who among us would have had the courage to retire Einstein, or Priestly, or our home grown Thomas Edison? If we look to medicine, let us dare replace Doctors Schweitzer and our own Paul Dudley White. Of our present President and of our near late Secretary of State, need we mention age?

An aged Russian, recently interviewed, was asked about the status of the elder in Russia, to which he replied, "Communism is only for the young?" One wonders if democracy is only for the young. We are eager to admit that these are times to test our nation and its resources, yet to cast away the thoughts and actions of those past sixty-five is indeed casting aside one of our rich natural resources.

From our standpoint of Christian and Jewish mortality, the commandment to honor our fathers and mothers should be given some serious consideration. Age should be no limitation to honor, nor should we be presumptuous enough to reinterpret the holy scripture by substituting a government daughter and son figure in place of our own responsibility.—R. K. Rank, M. D., in So. Dakota Journal, Medicine and Pharmacy.

Special Article

New Technology and Medical Electronics*

Charles B. Jolliffe, Ph. D.

It probably is in poor taste for me to start by congratulating you upon your wisdom and foresight in asking me here as your speaker. Yet, in a sense, that is what I feel impelled to do.

Until recently, an electronics man would have felt out of place at a medical convention. My presence and your gracious attention to what I have to say are encouraging signs. They symbolize the growing awareness in our respective fields of the need to communicate in order that we may jointly apply our talents in the service of mankind. So, when I begin by congratulating you, I am referring strictly to your recognition of the relevance to your profession of what an electronics man has to say.

At a time when so much of our technology seems to be directed toward potentially destructive ends, there is a broad trend in science itself which is multiplying our opportunities for constructive action. That trend is the lowering of the barriers that have traditionally separated the various scientific disciplines. In my own profession of electronics, for example, we now depend in our research upon the combined efforts of physicists, chemists, biologists, metallurgists, mathematicians and engineers, working side by side on many specific projects. You may picture these as combined task forces of science. The pattern is to be found today in most of the research organizations contributing to the swift development of our technology. As an example, in eastern West Virginia, the giant radio telescopes that are exploring the universe are the results of work by a scientific team of astronomers, mathematicians, physicists and electronic engineers.

The results have been most dramatically evident in terms of systems and hardware—mass communications systems, nuclear power plants, jet air transport, weather satellites and other appurtenances of our contemporary civilization. Unhappily, they have become just as evident in terms of supersonic bombers, long-range missiles and megaton thermonuclear warheads. Looking at these developments, we cannot deny the effectiveness of our scientific and technical talents. At the same time, it is obvious that humanity needs to match these talents with a comparable ability to make the wisest use of the technology that they have produced.

Against this background, the prospect of applying new electronic technology far more broadly to the needs of medical science strikes a bright, affirmative chord. It is a job that has special appeal for all of us who feel that the true purpose of science and technology is to aid, not to terrify, mankind.

An Embryonic Technology

Medical electronics today is an embryonic technology the potential of which still is a very long way from being realized. There is, as you well know, a great deal of specialized electronic apparatus already in use in medical research, diagnosis, surgery and therapy. The key word, however, is "specialized." The bulk of this apparatus has been developed with considerable ingenuity by experts in the medical and electronic professions and applied only in prototype form to a particular use. Only a small fraction of the total has passed through the subsequent engineering, testing and production phases to become widely available to the medical world.

I should be skating on thin ice if I presumed to tell you what the medical profession needs from electronics. Instead, I shall stand on my own ground and discuss a few of the developments that electronics has to offer, and what I feel must be done to encourage translation of the opportunities more broadly into useful tools for the medical profession.

The Author.

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Not at a Standstill

Our ability to control the electron, the smallest known particle in the universe, has extended amazingly the range of happenings we can perceive and use, and the amount of information we can handle. The important point is that technology is not standing still. Today's shirt-pocket radios and television weather satellites are the fruits of research conducted several years ago. In the laboratories, scientists and engineers are working on a new generation of devices and systems beside which today's most advanced equipment appears cumbersome and slow.

Miniaturization

We have taken many long steps toward further miniaturization and increased sensitivity, reliability and economy in all electronic apparatus since the introduction of transistors in place of electron tubes just over a decade ago. In miniaturization, we are graduating now to new concepts of extremely small packages known as micromodules. These are ultraminiature circuit components built onto tiny wafers which, in turn, are sandwiched together to form various electronic devices. Instead of a shirt-pocket radio, we now can build a radio set no larger than a fountain pen.

Integrated Electronics

These micromodule concepts are now finding their way into military and commercial electronic equipment, such as communications systems, control units and computers. But coming behind them in the laboratory are even more startling advances. With increased knowledge about electron behavior in materials, we are devising ways to perform several different circuit functions within a single small crystal. This is the concept known as "integrated electronics." With this concept, we can abandon the use of separate components and their various connections, and compress an entire circuit into a single sliver of material that may be only a fraction of an inch long and a few thousandths of an inch wide. Micromodules permit us to build a radio no larger than a fountain pen; integrated electronics may lead us to a complete and fairly sophisticated computer no larger than a stick of chewing gum.

We are advancing just as rapidly in speed and sensitivity as in miniaturization. We are well on the way to new computing systems that will operate one thousand times faster than the most advanced types in use today. Also, the sensitivity of electronic devices has moved rapidly ahead. A typical example is a new family of multiplier phototubes so sensitive that they detect, amplify and measure the presence and motion of nuclear particles whose life span may be only a billionth of a second. Another result is new photosensitive detecting and imaging devices whose performance approaches the physical limits set by nature itself. One of these devices, in fact, senses individual photons of light, and can pick up and transmit television pictures of scenes which appear absolutely dark to the unaided eye.

I could spend the better part of the day listing examples of continuing developments in electronic equipment. All of them would point emphatically to the principal trends in our technology: miniaturization, greater ability to detect very small effects, and increasing speed of operation. Clearly, these trends are particularly relevant to medical electronics.

Ultraminiature 'Radio Pill'

The potential can be seen in some of the recent experimental devices that have been developed cooperatively by specialists in our two professions. There is, for example, the ultraminiature "radio pill," a tiny transmitter encased in a plastic container small enough to be swallowed by a human patient and passed through the digestive tract. As it moves through the body, the device can measure pressure variations and transmit its findings by radio to a receiver next to the patient.

Then there is the thermistor thermometer, a small electronic device capable of measuring body temperature from the skin in a much shorter time than is required in using a standard clinical thermometer. Moreover, the temperature can be recorded automatically, simplifying the job of transferring the information to the patient's record.

There also are the techniques being developed for x-ray application, with the aim of cutting down the level of radiation needed for useful results. One of the simpler devices of this type is a thin screen intensifier panel which receives a low level x-ray image directly on one side, and converts it to a bright, high contrast visible image on the other.

Ultraviolet microscopy is being extremely simplified with the use of a new electronic image tube and magnifier that replaces the eyepiece of a conventional ultraviolet microscope. The ultraviolet image is converted by this device into a visible image of high brightness, making possible the study of tissues without the necessity of staining and fixing. Recently, color television techniques have been applied in a more extensive system in which the various ultraviolet absorption characteristics of living specimens are

translated into different colors displayed on the television screen, permitting study of fine details without modifying or killing the specimen.

Data Processing

Beyond these detailed applications lies another and far broader application of electronics to medicine, using techniques whose development occupies a large part of all electronics research today. I am referring to electronic data processing, which is rapidly being engineered into military and business systems.

Medical knowledge is constantly increasing, and already has outstripped the storage capacity of any one human brain. Just keeping up with new techniques and drugs is putting a terrific burden on busy physicians. New developments in medicine, as well as in other sciences, are coming so fast that time is not available for the busy man to keep up with the technical literature that is available. Also, many doctors cannot take the time to attend many meetings such as this one to discuss new experiences with their colleagues.

Electrically Stored Knowledge

Developments in data processing systems make it possible to store accumulated knowledge electrically, continuously up-date and correlate it. This information, then, can be made accessible upon demand to any doctor desiring it.

Also, by proper programming, the data can be automatically analyzed and processed so that its significance can be obtained in light of observed symptoms in a patient. By communications systems it could be available to serve doctors within a large area and could provide, within minutes, up-to-date diagnostic aid to any doctor, and data on therapeutic measures that have been found to be effective.

Some exploratory work along these lines already has been undertaken jointly by medical and electronics organizations. They have demonstrated that such an electronic data system can deliver useful information to the physician.

The programming of such machines and delivery of the processed information is the function of the engineer; the information to be processed and the interpretation of the medical results remain with the physician. The machines can make available the best and most up-to-date medical advice equally to the city or rural doctor. These machines have been called "computers," or "electronic brains," but I want to emphasize that they do not do the thinking processes or make the final decision. They simply present the best information available. The final decision as to how it can be applied to the patient must rest with the physician. It is a fast way of digesting and making available to all medical men the best of the existing knowledge among them.

Soaring Wings

These few examples of electronic progress which I have discussed and their potential application present an almost irresistible temptation to any speaker to soar off on wings of speculation. There are, in fact, few limits to the service which electronics can provide as a tool to the medical profession, all the way from research to diagnosis and treatment of patients.

Consider, for example, the observation and measurement of many bodily functions that are detectable today only crudely and with complex equipment. Every vital process is accompanied by an electrical or mechanical change. Electronic equipment is easily adaptable to the measurement of such changes in their most minute form. Today, we can convert the electrical impulse which activates a heart muscle, for example, into sufficient energy to illuminate a small light bulb connected to an electrode placed on the surface of the skin. Along this path lie new techniques of visual display to reveal functions within the body more effectively and far more simply than is the case today.

Putting together these detection and recording possibilities, we arrive at something very much like the electronic procedures used today to check out our intercontinental missiles. In these checkout systems, electronic instruments detect and report instantly and simultaneously upon all key functions in the missile: before flight to determine malfunctions, in flight to record performance and environment.

Anatomic Instrumentation

I am not going beyond the state of the electronic art when I say that practically any part of the human body can be instrumented and its functioning automatically recorded and displayed, either continuously or upon demand. Such principles will be used to keep a close check on the physical conditions of our first men in space. They are equally available for routine use in a hospital.

It is also reasonable to think that these same principles can be applied ultimately to standard medical practice to aid the physician in routine physical examinations and in diagnosis. Backed by medical electronic data storage and reference centers similar to our large data processing systems for industry and defense, they would bring a new order of speed, accuracy and convenience to regular process of observation, examination and diagnosis. Recognizing the prob-

lems posed by continuing swift growth of our population and the public demand for ever more comprehensive medical care, the desirability of such a development in the years to come would seem beyond question.

To Bridge the Gap

But where do we stand today? The new technology of medical electronics has been growing in a healthy fashion in recent years. But even with this growth, there remains a wide gap that must be bridged before we can begin to realize the full potential of electronics as a tool for medicine. Considerable effort and ingenuity are going into the development of electronic devices for medical use on an experimental or prototype basis. Relatively little is being done to apply electronics to large scale clinical use.

There are a number of reasons for this state of affairs. One obvious one, which I shall not discuss at length, is the shortage of funds and engineering facilities to convert the experimental devices into economical, reproducible forms for wide-scale application. Various proposals have been made to create either private or public agencies that can provide the needed support for such engineering work and for the exhaustive testing by which any new devices must be evaluated by the medical profession.

A more basic difficulty, perhaps, has been the weakness of communication between our two professions. A beginning has been made in the past few years by joint professional groups and increasing numbers of cooperative projects for development and testing of new techniques. These are helpful, but they represent an approach from the top only. They must be accompanied by intensive work at the education level as well.

Each new instrument or technique destined for medical use, whether or not it is electronic, naturally requires evaluation, instruction and familiarization for those who are expected to use it. But the educational effort to which I refer here is far broader. On one side, it involves a more general understanding among electronics people of the needs of the medical profession. On the other, it involves a broader appreciation by medical people of the advantages to be gained from electronic techniques. Such understanding and appreciation are harder to develop after the specialists have become established in their respective careers. They are far less difficult to achieve during the years of undergraduate and graduate training.

Opportunity Knocks in West Virginia

Here in West Virginia, there is an excellent opportunity to show how scientific barriers can be eliminated. The recently completed medical school and teaching hospital within the University community at Morgantown presents an ideal situation for close communication and joint programs among medical teachers and researchers, physical and natural scientists and engineers. It should be a location for fruitful research, development and application of new devices to medical use and instruction.

With such facilities as these, it is possible to instill in the young electronic engineers a feel for the environment in which medical electronic equipment must function. At the same time, the medical school and hospital provide opportunities for instruction and familiarization with the most promising new results of electronics and engineering. The effect, in the long run, should be a tendency among the engineering specialists to include the possibility of medical use in their plans for improved electronic equipment and techniques. At the same time, there should develop among the new medical specialists a readiness to evaluate and accept the new techniques and to assist in their development and application.

The Engineer and the Doctor of Medicine

There is no thought of turning doctors into engineers, nor engineers into doctors. We do not try, for example, to turn our Air Force pilots into engineers in order to equip them for using the very complex electronic gear built into aircraft. Instead, our engineers learn what the pilots need, and develop the equipment in the form best suited to their needs. The same procedure is appropriate in our approach to medical electronics. From the standpoint of the engineer, I can assure you that the aim is not to divert doctors from their field of medicine. Our engineers need to learn what is needed so that it can be developed in the most effective form. The methods which have been so effective in providing fantastic means of destruction can be applied equally well to provide means of defeating disease and giving longer and happier lives to millions of people.

Our best talents are required today to meet the needs of an expanding society in an ever more populous world. Opportunities are growing for broader communications between our two professions at the education level. Electronic technology is ready and able to do whatever is required of it. On this foundation, we can move ahead together in vigorous and sustained cooperation to apply our combined medical and engineering ability in full measure to the only goal which science and technology should seek—the greater benefit of mankind.

The President's Page

The Challenge Ahead

West Virginia physicians are experiencing the opportunity of being among the first in the nation to deal intimately and closely with the Medical Aid for the Aged program. Our MAA program began when the Legislature at the special session in October placed the responsibility for administering this program under the Department of Public Assistance. The MAA is entirely separate from other programs administered within the Department.

Those who are familiar with the social services in our state were convinced that the Department of Public Assistance was the logical agency to administer the MAA. No other tax supported agency serves the state with a staffed office in every county. The situations of our elderly citizens must be investigated by trained personnel with means at their command to determine eligibility.

The MAA program, if it is to be continued beyond March 31, must prove to the Legislature and our people that this is the best way to care for our over age sixty-five citizens. The Legislature approved the MAA only until March 31, and sent a resolution to Congress asking that legislation be enacted at the coming session to extend the Social Security system to include medical insurance for the aged.

The American people must be shown that medical care for the aged is only one phase of the overall program of caring for our aging citizens. The health and mental health of these citizens depend on employment, financial security, housing, recreation, spiritual life and all of the other factors of everyday living that affect people of all ages. It is for this reason that we look forward to the White House Conference on Aging which will be dealing with all of the facets of the problems of the aging. Workshops will be held covering such topics as Population Trends and Social and Economic Implications; Income Maintenance; Impact of Inflation on Retired Citizens; Employment Security and Retirement; Health and Medical Care (including Institutional Care, Care at Home, Health Maintenance, Mental Health, Organization of Community Services, and Rehabilitation).

Delegates to the White House Conference appointed by Governor Cecil H. Underwood include Dr. C. Royall Kessel of Ripley, Dr. George R. Callender, Jr., of Charleston, Charles Lively of Charleston, Mrs. G. Thomas Evans of Fairmont, and Mrs. John W. Hash of Charleston. These people were appointed for the work done by them on the West Virginia Commission on Aging, the study groups in preparation for the Governor's Conference on Aging in September, and participation in the Governor's Conference.

To return to our own problem in caring for the aging, which involves their medical care, may we add that Mr. Thomas Egbert, Director of the Department of Public Assistance and his staff have been working diligently to set this program in motion. Under the MAA, hospitals will be paid for the actual cost of caring for these people and physicians will be paid a more realistic fee than under the DPA schedule. It is incumbent upon every physician in West Virginia to lend every effort in support of the MAA program. It was the method endorsed by the AMA to care for the aged and it had the support of the Eisenhower Administration.

Let it never be said that any physician in West Virginia failed in proving to West Virginians and the people of the Nation that we do not shirk responsibility for the care of the indigent of any age group, but that we feel that the dignity of the aged, indeed the dignity of all, can best be preserved in the American Way.

John W. Hash

John W. Hash, M. D., President

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EDITORIALS

ABILITY RECOGNIZED IN APPOINTMENT OF CLARK K. SLEETH

One of the highlights of the year 1960 so far as members of the West Virginia State Medical Association are concerned was the selection in mid-December of Clark K. Sleeth as Dean of the West Virginia University School of Medicine. He succeeds Dr. Edward J. Van Liere, who retired several months ago but who agreed to remain as dean pending the selection of a successor.

Doctor Sleeth knows personally all of the students who have attended our two-year school of medicine during the past two decades but who later had to complete their education at medical schools outside the state. Along with Doctor Van Liere, he realized the fulfillment of a dream of long standing with the construction of a four-year school of medicine at Morgantown.

The new dean has not confined his activities to the campus of the University. Time and again he has visited every part of the state and has always been available for consultation by the young men and women who sought to make the practice of medicine their life's work. His advice has paid big dividends for West Virginia, and through his efforts, many graduates who might have located outside the state have decided to remain within our borders. As these potential physicians now have the opportunity to complete their medical education at the University, there is every indication that there will be a sharp in-

Dr. Clark K. Sleeth, Dean
WVU School of Medicine

crease in the percentage of graduates who decide to locate in West Virginia.

Clark Sleeth has always enjoyed the respect and confidence of the members of the State Medical Association. He has accepted without hesitation assignments to serve as a member of key committees, and he has literally gone out of his way to help alleviate the doctor shortage in this state. His close association with medicine as it is practiced and with the University as a teaching school stand him in good stead as dean of the School of Medicine.

The powers that be at the University could not have possibly done anything that could be more pleasing to the physicians of this state than to appoint Clark K. Sleeth to such an important post.

We congratulate all those who had any hand in his selection, and on behalf of the members of the State Medical Association pledge to him full support and active cooperation in the discharge of his new duties. He has our sincerest good wishes for success.

WEST VIRGINIA'S HEALTH NEEDS

On September 1, 1960 all State governmental agencies sent to the State Budget Director a budget request for the fiscal year 1962. The State Health Department's request totaled $1,567,288, an increase of $799,148, or 104 per cent, over the current budget for the fiscal year ending June 30, 1961.

This requested appropriation of approximately one and one-half million dollars was recommended by the State Board of Health following a thorough study of the Department's fiscal requirements to provide adequate public health services for the citizens of the State. The 1962 budget request included a new item titled "Local Health Services" for which $766,320 was requested for distribution to counties. This item, which represents 90 per cent of the total increase, would ultimately provide health departments in all of the State's fifty-five counties to make available to the citizenry such basic services as vital statistics, sanitation, communicable disease control, laboratory services, maternal and child health, health education and control of chronic diseases.

Following a review of all budget requests the State Budget Director prepared a recommended budget based on estimated future resources from tax collections. The total amount of funds recommended for the Health Department was $1,259,424, an increase of $491,284, or 64 per cent, over the current budget. The recommendations of the State Budget Director have been furnished the State Board of Public Works which will conduct budget hearings with agency representatives and then prepare a Budget Document to present to the State Legislature when it convenes in January.

Perhaps the logical reaction to this sequence of events is a question as to what justification the Health Department has for requesting a future appropriation that is more than twice its present budget. The answer lies in the fact that West Virginia has lagged far behind all other states in providing appropriations for public health. National statistics show the average state increase for public health during the decade 1950-1960 was 106.1 per cent. That is, the total appropriations by all states and territories increased from $86,038,143 in 1950 to $177,289,250 in 1960, an increase of $91,251,107. During this same decade the State appropriation for public health in West Virginia declined from $829,994 in 1950 to $753,390 in 1960, a loss of $76,604, or 9.2 per cent. West Virginia was the only state that showed a decline in health appropriations during the decade. Surrounding states showed marked increases in the comparative report which was recently released by the United States Public Health Service. Examples are: Kentucky, 244.7 per cent; Maryland, 173.6 per cent; Ohio, 279.8 per cent; Pennsylvania, 125.9 per cent; and Tennessee, 120.7 per cent. To demonstrate one of the effects of this penurious attitude we would cite the fact that West Virginia's death rate from tuberculosis is 12 per cent higher than the national average and the morbidity rate 18 per cent higher.

Since the recommended increase for fiscal year 1962, amounting to approximately one-half million dollars, is for the most part designed to improve public health activities in the local health departments, just how would this money be used? The State Board of Health would equitably distribute this appropriation to local boards of health based on local public health needs and ability of local appropriating agencies to provide the required public health services.

There are currently 265 full-time public health employees in the 52 counties maintaining health departments. The counties of Pendleton, Tucker and Wirt do not have health departments although there is a part-time health officer in Pendleton and Tucker. These employees for the most part fall into the following four classifications: health officers, providing medical direction to the public health programs; public health

nurses; sanitarians; and clerical personnel. A very few counties employ laboratory technicians, x-ray technicians and social workers.

There are currently only eight full-time health officers throughout the entire State. There should be at least twenty-two if adequate medical direction in planning and conducting basic public health programs and the newer programs in radiological health, accident prevention, and air and water pollution are to be realized. To recruit fourteen additional health officers with provision for travel allowance would cost upward of $200,000.

By far the largest single group of employees in the local health departments consist of public health nurses. There are currently employed in the 52 counties, 124 nurses, representing 47 per cent of the 265 full-time employees. Professional public health organizations and graduate schools of public health have established personnel-population ratios, indicating that one nurse per 5,000 population is necessary to provide good public health nursing service. In West Virginia this ratio is one nurse per 15,000 population. Consequently the services provided are far from adequate. To meet recommended standards would require the employment of 246 additional nurses at an annual cost of more than a million dollars. We know that such a request for funds would be unrealistic.

What has been done in preparing the 1962 fiscal budget request is to present what we believe is a sound "State-Local Assistance Plan" to aid local health departments in providing good public health services for all the citizens of the State, and we bespeak the support of the Legislature for the budget presented by the State Board of Health.

THE JOURNAL OF SURGICAL RESEARCH

It has just been announced that the W. B. Saunders Company expects to launch a new medical journal early in 1961. The title of the publication, which is still in the embryonic stage, will be *The Journal of Surgical Research.* This new periodical will be dedicated to the critical selection and prompt publication of experimental work contributing to the advancement of surgical science. Consideration will be given to reports of research which illuminate the nature of surgical disease, or which suggest new methods for its study, its recognition, or its management.

The names of the members of the editorial board are sufficient evidence to justify the prophecy that this journal will live up to the standards set by the publisher. This is the first journal, as far as we know, ever put out by Saunders. One of the unique features will be that advertising will not be accepted. An attempt will be made to present surgical research promptly. A three-year cumulative index will be presented in the final issue of each year.

We welcome the newcomer, which will limit itself to a field not heretofore covered except in general surgical and medical publications. We bespeak for the new publication a hearty welcome by the profession, and especially by the surgeons, and predict for it a long and useful life.

C. P. LORANZ

The recent "History of the Southern Medical Association, 1906-1956," by C. P. Loranz is a monument to the author and really presents the activities and accomplishments of that great organization as no other person could possibly have done. Mr. Loranz was the first lay executive officer of a medical society in the United States, having become Business Manager of the Southern Medical Association on October 7, 1912, his duties including also the business management of the *Southern Medical Journal.* On November 17, 1921, the Council named him Secretary, Treasurer and General Manager, with the official title of Secretary-Manager, which position he occupied until November 30, 1954. The next five years he was continued in an active capacity of Advisor and Professional Relations Counselor. At the 1959 meeting in Atlanta he received the permanent title of Advisor and Special Consultant and since then he has had a minor continuous service in that capacity.

Mr. Loranz was born in Clarinda, Iowa, August 17, 1882, but moved to Alabama with his parents in early childhood and has been a citizen of the land of "Here We Rest" ever since. He is a Presbyterian and has been an elder in his local church for many years. We would classify him as a "conservative with the brakes on" and a human dynamo in going after what he deems to be proper objectives. When he took the helm of the Southern Medical Association he found it a struggling group of a few hundred, whereas it is now one of the largest medical associations in the entire world. Almost insolvent then, with assets of only about a thousand dollars, he guided it to one owning its own home, an outstanding scientific journal, and assets conservatively estimated at half a million, all largely due to his wisdom, foresight, hard work and bulldog tenacity.

Those of us who have been privileged to work with Mr. Loranz over the years have learned to love him not only for his service to medicine in the South, but for his genial disposition, his personal worth and his firm advocacy of the right as he sees right. Recognition of his service to organized medicine was accorded a few years back when Erskine College bestowed upon him the honorary degree of Doctor of Science—an honor well deserved.

We note with pleasure that the Council at the recent meeting in St. Louis assigned Mr. Loranz the duty of continuing the history of the Association from the Golden Anniversary in 1956. We feel sure he will find this a pleasant task and will carry it out with his usual vim and accuracy.

Many more years of useful life to him!

FULL-TIME STAFFING OF MEDICAL SCHOOLS

Recently data were sent out by the Association of American Medical Colleges which concern medical school full-time faculty staffing. It was pointed out that in 1951 one out of every four faculty members in all the medical schools in the United States held a full-time appointment. In 1960, nine years later, one out of every three faculty members was a full-time appointee. The numbers given include the men with the M. D. degree engaged not only in teaching, but also in research and administrative services, as well as men with the doctorate degree in the basic sciences. Further, the figures also include geographic as well as strictly full-time teachers.

Between 1951 and 1960 the number of medical schools increased only from 79 to 85, whereas the number of full-time faculty members increased from approximately 4,000 to 11,000. There is evidence, however, that some of the increase in faculty is attributable to the tremendous increase in research budgets now available to medical schools.

Obviously there is a definite trend toward a larger proportion of full-time faculty men. This is thought by many to be an important indicator in the continuing effort to elevate standards in medical education. But it should be noted that there is a shortage of full-time faculty. United States medical schools reported that for 1958-1959 there were 655 budgeted unfilled full-time positions. Presumably, this lack is in part at least compensated for by part-time men.

There is a school of thought, however, which feels that there should be a good percentage of physicians, essentially engaged in private practice, teaching in the clinical subjects. The practicing physicians may be said to be on the firing line. It has been stated that the full-time man is an idealist, whereas the practicing physician has to be a realist, and that medical students should, a part of the time at least, be in contact with these latter men. But the dedicated, academically oriented full-time teacher often has a somewhat different approach than the part-time practitioner of medicine. He is more likely to emphasize fundamental and basic concepts which are the starting points for advances in the science of medicine.

There is a growing feeling that men who teach in medical schools should devote a considerable part of their time to keeping abreast with the literature, doing research work and writing. It is indeed difficult for a man who has an active private practice to meet his classes regularly and also do research work. Such a person must have boundless energy and an enormous capacity for work. Fortunately, there are some individuals who can do this.

It is not in the province of this editorial to review all the pros and cons concerning the matter of full-time and part-time teachers. In point of fact, most medical schools in the United States rely on men in the private practice of medicine to aid in the teaching program. The writer of this editorial feels that these men can make worthwhile contributions to medical education.

AMEF

It is essential that the medical profession support materially medical education in this country. The drive of the AMEF for the conclusion of the fiscal year ending January 31, 1961, brings to each of us the opportunity to contribute to this worthy cause. Donations are income tax deductible and may be earmarked for any medical college the donor cares to name. So far this year, the donations have been above $800,000, and it is desired that by January 31 they be well above $1,000,000.

Back to Fundamentals

The "three R's" of medicine are the history, the physical examination, and essential laboratory procedures. Although frequently obscured by a dazzling barrage of spectacular laboratory procedures, modern medicine has produced nothing of more diagnostic value than an accurate medical history. There is good reason to believe that the current popularity of the malpractice suit will foster a return to fundamentals, and that the too often neglected history and physical will become the harassed physician's most potent weapons of defense.—LeRoy H. Sloan, M. D., in International Medical Digest.

GENERAL NEWS

Dr. Clark K. Sleeth Named Dean Of WVU School of Medicine

Dr. Clark K. Sleeth of Morgantown has been appointed Dean of the West Virginia University School of Medicine, effective January 1. Announcement of the appointment was made last month by University President Elvis J. Stahr, Jr.

Doctor Sleeth succeeds Dean E. J. Van Liere, who has served as a member of the faculty at the School of Medicine since 1921. He was named Dean in 1935 and served in that capacity until his retirement last year. He will continue to serve as Professor of Physiology.

Graduate of University

The new dean was graduated from West Virginia University in 1933 and received a B. S. degree in 1935 from the two-year School of Medicine. He continued his medical education at the University of Chicago School of Medicine, receiving his M. D. degree in 1938.

Following an internship and residency at the Henry Ford Hospital in Detroit, Michigan, 1938-41, he returned to the University in 1941 as assistant professor of medicine. He has remained at the University since that time, except for service during World War II with the Medical Corps of the United States Army Air Force.

In 1948, Doctor Sleeth was appointed associate professor of medicine and in 1958 he was named assistant to the dean. He is the author or co-author of numerous articles which have appeared in professional journals and his primary research has been in the field of gastrointestinal physiology.

Mrs. Sleeth President of State Auxiliary

Doctor Sleeth is married to the former Nellie Strouss, a native of Morgantown and a graduate of the University. Mrs. Sleeth is currently serving as President of the Woman's Auxiliary to the West Virginia State Medical Association.

They have three daughters: Anne, a senior at the University; Mary, a senior at Morgantown High School; and Jane, a sixth grade student.

Active in Organized Medicine

Doctor Sleeth is a member of the Monongalia County Medical Society, West Virginia State Medical Association and the American Medical Association. He served for three years as secretary of his local society and was named president in 1951.

He has participated actively in the affairs of the State Medical Association and served a term as first vice president. He is a past president of the West Virginia Heart Association and since 1957 has served as a member of the West Virginia Board of Examiners for Practical Nurses.

He is a member of Phi Beta Kappa, Sigma Xi and several other professional organizations.

In addition to his teaching duties, Doctor Sleeth has been active in University and community affairs. He is chairman of the University Committee on Student Discipline and of the School of Medicine's Committee on Admissions. He was a member of the Monongalia County Board of Education from 1956 to 1960 and is currently vice president of the Morgantown Chamber of Commerce. He is a past president of the Rotary Club in that city.

'Responsibility Clearly Recognized'

In accepting the deanship, Doctor Sleeth said: "The responsibility of the deanship of the School of Medicine is clearly recognized by one who has had a long association with the School.

"The history of the development, the careful planning and execution of recent expansion, the investment of hopes, aspirations and substance by educators, physicians and all the people combine to provide a unique opportunity for progress in medical education, and broadly outline the great extent of the responsibility."

He said a cooperative effort by the School of Medicine and the University faculty and staff, state physicians, and the people of West Virginia will be necessary to continue the programs begun by Dean Van Liere.

Commenting on Doctor Sleeth's appointment, Dean Van Liere said: "I feel extremely proud and happy that one of my boys is taking over my position as dean of the medical school. Judging from my experience

State Physicians To Receive 1961 Roster of Members

The 1961 Roster of Members of the West Virginia State Medical Association will be mailed to members early in January. The Roster will include the names and addresses of all members of the State Medical Association, broken down by component societies.

It will also include a listing of the members of the standing and special committees, together with the officers of the various sections and affiliated societies and associations.

with him over a quarter of a century, I feel certain he will be successful in his new position."

President Stahr said: "Doctor Sleeth is clearly one of the most respected members of the University, as well as in the community of Morgantown. He also is a recognized leader in the medical profession of the state.

"My recommendation to the Board of Governors that he be appointed dean was based not only upon my absolute confidence in his ability and dedication but also upon very strong endorsement by our medical faculty and students, by the West Virginia State Medical Association, and by many individual citizens who know him well.

"In my view, his selection is a 'natural.' Vice-President Penrod and I are both happy indeed with this further evidence that there are within the University itself men of sufficient stature to assume leadership roles involving great responsibilities."

W. Va. Acad. Oph. and Otol. To Meet At The Greenbrier, April 6-8

The 14th annual meeting of the West Virginia Academy of Ophthalmology and Otolaryngology will be held at The Greenbrier in White Sulphur Springs, April 6-8, 1961.

Dr. Worthy W. McKinney of Beckley, the secretary, announced that four prominent physicians have accepted invitations to appear as guest speakers during the meeting. Each speaker will present two papers.

The following program will be presented:

"Recent Developments and Personal Experiences in Cataract Surgery," and "Clinical Genioscopy."—Harvey E. Thorpe, M. D., Pittsburgh, Pennsylvania.

"Fenestration of the Oval Window After Five Years," and "Vein Graft Tympanoplasty."—John J. Shea, M. D., Memphis, Tennessee.

"Laryngeal Keratosis: A Clinico-Pathologic Problem," and "Neck Dissection in Cancer of the Larynx."—F. Johnson Putney, M. D., Philadelphia, Pennsylvania.

Dr. Irving H. Leopold of Philadelphia will also appear as a guest speaker and the subjects of his papers will be announced at a later date.

The program committee also announced that one afternoon session will be devoted to a demonstration of the various techniques of contact lens fitting. The program will be presented by Mr. Philip Salvatori of Obrig Laboratories.

Registration fee for the three-day meeting is $25. Further information concerning the program may be obtained by writing to the secretary, Dr. Worthy W. McKinney, 109 E. Main Street, Beckley, West Virginia.

Relocations

Dr. E. L. Linger of Clarksburg, who has been serving a residency in anesthesiology at the Ohio Valley General Hospital in Wheeling, has accepted appointment as anesthesiologist and Head of the Department of Anesthesiology of the new Union Protestant Hospital in Clarksburg. He assumed his new duties on December 15, 1960.

Council Approves Introduction Of Medical Examiner's Bill

The Council of the West Virginia State Medical Association has unanimously approved the recommendation of the Legislative Committee that the Association sponsor a Medical Examiner's bill which is to be introduced at the regular session of the Legislature in January, 1961.

A favorable report on the subject submitted by Dr. Frank J. Holroyd, chairman of the Legislative Committee, was approved at the regular fall meeting held at the Daniel Boone Hotel in Charleston on November 13. The chairman said that plans would be completed immediately for the introduction of the bill early in the session.

Doctor Holroyd also reported that his committee had given mature consideration to the matter of the introduction in the Legislature of a bill to provide for and regulate the method of withdrawal of blood to determine alcoholic content. He said that the members of

New members of the Council of the West Virginia State Medical Association are shown at the meeting held in Charleston on November 13. Left to right, Drs. Richard V. Lynch, Jr., Clarksburg, Paul P. Warden, Grafton, T. P. Mantz, Charleston, and Ward Wylie, Mullens.

the committee were of the opinion that such a bill should not be sponsored by the State Medical Association, and the Council approved the recommendation.

A plea was made by the president, Dr. John W. Hash, that all of the members of the Council assist the State Board of Health and the State Director of Health in every way possible to obtain needed increases in appropriations for the new fiscal year.

Medicare Contract Renewed

The executive secretary reported that the Office for Dependents' Medical Care had agreed to extend the present contract so as to fix the current expiration date as December 31, 1960, instead of November 30, 1960, thus placing the contract on a calendar year basis. This change was approved by the Council, which also approved the execution of a renewal of the present Medicare contract for the period from January 1 to December 31, 1961.

Ban on Sale of BB Guns Proposed

The executive secretary read a letter from Dr. Alfred J. Magee, an ophthalmologist of Charleston, concerning the sale and use of BB guns in West Virginia. In his letter, Doctor Magee said that he sees approximately two patients each year with eye injuries caused by BB guns, and that he can recall but two of such instances in which the patient has not lost completely the sight of the injured eye.

Doctor Magee brought to the attention of the Council the fact that there is a law in New Jersey forbidding the sale and possession of BB guns in that state.

Speaking for himself, as well as for the members of the West Virginia Chapter of the National Society for the Prevention of Blindness, he said that the matter is being presented to the Council in an effort to enlist the support of the West Virginia State Medical Association in obtaining legislation, which would outlaw BB guns in West Virginia.

The matter was referred to the Legislative Committee for further consideration.

Publication Committee Members Elected

Dr. George F. Evans of Clarksburg was reelected a member of the Publication Committee for the term ending December 31, 1967.

A letter addressed by Dr. R. H. Edwards of Welch to Dr. Walter E. Vest, Editor of *The Journal*, was read by the executive secretary. In the letter, Doctor Edwards tendered his resignation as a member of the Publication Committee.

Dr. Halvard Wanger of Shepherdstown, who is currently serving as the chairman of the Program Committee, was elected to fill the term of Doctor Edwards which expires on December 31, 1965.

Survey in re Incorporation of Societies

The advisability of the incorporation of component societies was emphasized by Doctor Hash, and it was ordered that this matter be brought to the attention again of the secretaries of all such societies. A report on the subject is to be submitted to the Council at the next meeting.

MAA Resolutions Received

Receipt of resolutions from several component societies in re the new MAA program was reported by the executive secretary. Resolutions were reported as having been received from the Cabell County Medical Society, the Academy of Medicine of Parkersburg, and the Harrison, Logan, Ohio and McDowell County medical societies.

Discussion of the problem for medical care for the aged was led by Doctor Klumpp, chairman of the Medical Economics Committee. Mr. James Fleming of Chicago, representing the field service of the AMA Council on Medical Service, discussed the Kerr-Mills bill, and submitted an oral report concerning steps that are being taken by other states to follow through on the new federal program.

The executive secretary reported a one hundred per cent attendance of the members of the Council, the second consecutive meeting which has drawn a full attendance.

The following is a list of those who attended the meeting:

Dr. J. C. Huffman, Buckhannon, Chairman; Dr. John W. Hash, Charleston, President; Dr. D. E. Greeneltch, Wheeling, President Elect; Dr. L. J. Pace, Princeton, Vice President; Dr. Daniel N. Barber, Charleston, Treasurer; Dr. George F. Evans, Clarksburg, Councillor at Large; and Drs. Richard E. Flood, Weirton, Paul P. Warden, Grafton, J. C. Pickett, Morgantown, S. Elizabeth McFetridge, Shepherdstown, C. R. Davisson, Weston, Richard V. Lynch, Jr., Clarksburg, Charles L. Goodhand, Parkersburg, Albert C. Esposito, Huntington, Harold Van Hoose, Man, Ward Wylie, Mullens, Clyde A. Smith, Beckley, and Theodore P. Mantz, Charleston; and Charles Lively, secretary ex officio, and William H. Lively, executive assistant.

The meeting was also attended by Dr. Walter E. Vest of Huntington, Editor of *The Journal;* Drs. Frank J. Holroyd of Princeton and Charles A. Hoffman of Huntington, AMA Delegates; Dr. Thomas G. Reed of Charleston, AMA Alternate; Dr. James S. Klumpp of Huntington, Chairman of the Medical Economics Committee; Dr. N. H. Dyer of Charleston, State Director of Health; and Mr. James Fleming of Chicago, Field Representative of the AMA Council on Medical Service.

1961 Session of Legislature To Convene on Jan. 11

The 1961 session of the West Virginia Legislature will be convened at The Capitol in Charleston on Wednesday, January 11, with final adjournment set for Saturday, March 11.

It is expected that several bills of interest to the medical profession will be introduced during this regular 60-day session.

The headquarters offices of the State Medical Association in Charleston will prepare and mail Legislative Bulletins to the entire membership during the session. News of legislative proceedings will also be carried in future issues of *The Journal.*

ACS Sectional Meeting in Philadelphia

A sectional meeting of the American College of Surgeons will be held in Philadelphia, March 6-9. Headquarters will be the Bellevue-Stratford, Ben Franklin, and Sylvania Hotels, with some sessions scheduled at leading hospitals in the city. The ACS has invited surgeons, graduate nurses and related medical personnel from all parts of the country to attend the meeting.

The program will include hospital clinics, panel discussions, symposia, scientific papers, industrial exhibits and medical motion pictures.

Further information concerning the program may be obtained by writing to the ACS, 40 E. Erie Street, Chicago 11, Illinois.

Publication Committee Members Elected by Council

Dr. George F. Evans of Clarksburg has been reelected by the Council as a member of the Publication Committee of the West Virginia State Medical Association, for the term ending December 31, 1967.

Dr. Halvard Wanger of Shepherdstown also was elected a member of the committee to succeed Dr. R. H. Edwards of Welch, who resigned recently after serving for several years as a member. Doctor Wanger will serve the unexpired term ending December 31, 1965.

The Publication Committee is composed of a chairman, who is the editor of *The West Virginia Medical Journal*, and six other members who serve as associate editors. The committee is in charge of the publication

George F. Evans, M. D.

Halvard Wanger, M. D.

of *The Journal*, which is the official organ of the West Virginia State Medical Association.

Doctor Evans is a native of Canada and he received his M.D. degree from McGill University in Montreal. He served his internship and had postgraduate work at hospitals in the eastern part of the country. His specialty is internal medicine.

He is a past president of the West Virginia State Medical Association and also served as secretary and president of the Harrison County Medical Society.

Doctor Wanger was born in Chicago, Illinois, and received his M.D. degree from the University of Illinois College of Medicine. He interned and served residencies in anesthesiology at hospitals in Chicago.

He is a past president of the Eastern Panhandle Medical Society and the West Virginia Chapter of the American Academy of General Practice. He is chairman of the Program Committee in charge of making arrangements for the 94th Annual Meeting of the West Virginia State Medical Association at The Greenbrier, August 24-26, 1961.

New BC-BS Manager in Marion

Mr. Howard L. Reitz, who has had many years' experience in Blue Cross work in Pennsylvania, has been named as acting manager of the Marion County Blue Cross-Blue Shield Plans, with offices in Fairmont. He succeeds L. Mason Brooks who resigned last fall after several years' service with the Fairmont plans.

State Physicians To Participate In S. E. Surgical Program

Several West Virginia physicians will participate actively in the 29th Annual Assembly of the Southeastern Surgical Congress which will be held at the Deauville Hotel in Miami Beach, Florida, March 6-9.

Dr. Bernard Zimmermann, professor and chairman of the Department of Surgery at the West Virginia University School of Medicine, will present a paper on "The Dynamics of Electrolyte Balance in the Postoperative Surgical Patient."

Dr. Nicholas W. Fugo, professor and chairman of the Department of Obstetrics and Gynecology at the WVU School of Medicine, will present a paper on "The Clinical Application of the Oxytocic Sensitivity Test."

Two other state physicians, Drs. Hu C. Myers of Philippi and T. Kerr Laird of Montgomery, will open the discussion following the presentation of papers by guest speakers.

Further information concerning the program may be obtained by writing to Dr. A. H. Letton, Secretary-Director, The Southeastern Surgical Congress, 340 Boulevard, N. E., Atlanta 12, Georgia.

Harry M. Huff Named to DPA Post

Harry M. Huff of Charleston, who was employed by the State Department of Health for several years, has been appointed Chief of Business Management of the Department of Public Assistance. His work will deal primarily with the new medical care program for the aged.

A native of Bluefield, Mr. Huff has been assistant production planning coordinator at Monsanto Chemical Company in Nitro during the past year. He joined Monsanto after serving for four years as Director of the Division of Vital Statistics, State Department of Health.

Fellowships in Ophthalmology

The Guild of Prescription Opticians of America, Inc., has announced that the organization will award six additional fellowships to residents in ophthalmology in 1961. Each fellowship is worth $1,800, payable in monthly stipends over the period of a three-year residency. Applications for the fellowships must be submitted to the Guild by May 15, 1961.

Further information concerning the fellowships may be obtained by writing to Guild of Prescription Opticians of America, Inc., 110 E. 23rd Street, New York 10, New York.

ACS Meeting at The Greenbrier, April 14-15

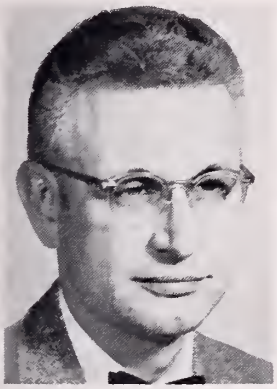
The annual meeting of the West Virginia Chapter of the American College of Surgeons will be held at The Greenbrier in White Sulphur Springs, April 14-15.

Dr. Ray E. Burger of Welch, the president, announced that the scientific program will feature several prominent out-of-state speakers, as well as the presentation of papers by West Virginia physicians.

State Physicians Present Papers At AMA Clinical Meeting

Two West Virginia physicians, Drs. Justus C. Pickett and Bernard Zimmermann, both of Morgantown, presented papers at the 14th Clinical Meeting of the American Medical Association in Washington, November 28-December 1.

Doctor Pickett, who is clinical professor of surgery and chairman of the Division of Orthopedic Surgery at the West Virginia University School of Medicine,



Bernard Zimmermann, M. D.

Justus C. Pickett, M. D.

was among the speakers at a meeting on orthopedic surgery and trauma which was held on Wednesday, November 30. The subject of his paper was "Pitfalls in Common Fractures."

Doctor Zimmermann, professor and chairman of the Department of Surgery at the WVU School of Medicine, participated in a panel discussion on "Nodules of the Neck" which was presented on Monday, November 28. The moderator was Dr. Calvin T. Klopp of Washington, D. C.

State Physicians Attend Meeting

More than 50 West Virginia physicians attended the four-day meeting. Total attendance was 8,170, including 3,940 physicians and 4,239 guests.

Drs. Frank J. Holroyd of Princeton and Charles A. Hoffman of Huntington, official delegates from the West Virginia State Medical Association, were present at the meeting and attended all sessions of the AMA House of Delegates.

Dr. James S. Klumpp of Huntington and Dr. George R. Callender, Jr., of Charleston, attended a conference on "Federal-State Medical Care Program for the Aged," which was held on Sunday, November 27, the day prior to the formal opening of the meeting.

Doctor Klumpp is chairman of the Medical Economics Committee of the State Medical Association, and Doctor Callender is chairman of the Committee on Aging.

Headquarters for the meeting was the Sheraton-Park Hotel. Scientific sessions were held at the District of Columbia National Guard Armory.

Actions of the House of Delegates

The following summary of the Washington meeting was prepared for publication by Dr. F. J. L. Blasingame, executive vice president of the American Medical Association:

A scholarship and loan program for medical students, the status of foreign medical graduates, an AMA membership dues increase, the expansion of voluntary health insurance, health care for the aged and new developments in polio vaccine were among the major subjects acted upon by the AMA House of Delegates.

Named as 1960 General Practitioner of the Year was 44-year-old Dr. James T. Cook of Marianna, Florida, who was selected for his dedication to both medical practice and service to the community. Doctor Cook is the 14th recipient of the award.

Speaking at the opening session on Monday, Dr. E. Vincent Askey of Los Angeles, AMA President, called upon the delegates to support not only existing AMA programs but also expansion of new programs necessary to meet the challenges of society. Doctor Askey assured the new administration in Washington of cooperation whenever and wherever possible but emphasized that the AMA will not change its policies merely for the sake of conformity.

Scholarship and Loan Program

The House of Delegates approved a scholarship and loan program proposed by the Special Study Committee of the Council on Medical Education and Hospitals, and also urged that there shall be local participation in the program at the state and county level. In commenting on the two-part program, the House approved the following statement by the reference committee:

"This proposed program will provide concrete evidence of the American Medical Association's sincere desire to attract increasing numbers of well qualified young people to enlarge the ranks of our profession. Your reference committee recognizes that the program is wisely designed to allow for its enlargement through the support of individual physicians and other groups. Your reference committee was impressed with the enthusiastic support of this proposal indicated during the course of the discussion. There was indicated a desire that in the final formulation of the administrative details of this program, provision be made for widespread participation by individual physicians as well as county and state medical societies. The program will clearly assist in securing highly talented individuals whose ability and leadership in all areas of medicine will be fostered and at the same time will bring needed financial assistance on a broad basis to medical students under a system in keeping with this Association's belief in individual responsibility."

Foreign Medical School Graduates

Meeting the problem of foreign medical graduates, the House of Delegates adopted a report which included the following statement:

"In order that those foreign physicians who have not yet been certified by the Educational Council for Foreign Medical Graduates might by given further

opportunity to enhance their medical education, hospitals would be encouraged to develop special educational programs. Such programs must be of educational worth to the foreign graduate and must divorce him from any responsibility for patient care. Foreign physicians may participate in these programs until June 30, 1961, with approval of the Department of State so that their exchange visa will not be withdrawn before that time. This will also allow the non-certified foreign physician the opportunity to take the April, 1961, Educational Council for Foreign Medical Graduates examination."

AMA Dues Increase

The House approved a Board of Trustee report which announced that a dues increase would be recommended at the annual meeting in June 1961. The report indicated that the amount would be not less than $10 and not more than $25 to be effective January 1, 1962. The Reference Committee asked the Board to consider an increase in the annual dues of $20, to be implemented over a period of two years: $10 on January 1, 1962, and $10 additional on January 1, 1963.

The House suggested that these funds be used to inaugurate or expand a number of programs including: (1) Financial assistance to medical students, (2) Continuing education for practicing physicians, (3) Health advice to the lay public, (4) Medical research, and (5) The expansion by the Communications Division of its program of faithfully portraying the image of the American Medical Association.

It is important, the House emphasized, that the Board of Trustees report recommending a dues increase be transmitted in essence to the grass roots level.

Voluntary Health Insurance

In place of a Board of Trustees report and three resolutions, the House adopted the following substitute resolutions:

"Whereas, It has been widely recognized that voluntary health insurance is the primary alternative to a compulsory governmental program; and

"Whereas, The public has shown its confidence in this voluntary system; and

"Whereas, Current social, political and economic developments compel a new and revitalized effort to make voluntary health insurance successful; and

"Whereas, the American Medical Association has consistently pledged itself to make available the highest type of medical care; therefore be it

"*Resolved*, that the House of Delegates direct the Board of Trustees and the Council on Medical Service to assume immediately the leadership in consolidating the efforts of the American Medical Association with those of the National Association of Blue Shield Plans, the American Hospital Association and the Blue Cross Association into maximum development of the voluntary, non-profit prepayment concept to provide health care for the American people; and be it further

"*Resolved*, that similar leadership be undertaken to coordinate the efforts of private insurance carriers through conferences with their national organizations; and be it further

"*Resolved*, That, where feasible, efforts be made to cooperate with representatives of other types of medical care plans, other professional groups, and representatives of industry, labor and the public at large."

Health Care for the Aged

The House reaffirmed the Association's support of the Kerr-Mills Bill, which was passed last summer, and its opposition to any legislation involving the use of the OASDI mechanism for medical aid to the aged. The delegates also urged all state and local medical societies to cooperate with the appropriate state officials and provide leadership in implementing the provisions of the Kerr-Mills Bill.

In connection with health care for the aged, the House suggested further experimentation in home care programs, homemakers services and visiting nurses services. The delegates also recommended an increased emphasis at all levels of medical education on the new challenges being presented to physicians in the health care for older persons.

Polio Vaccine

The House agreed with a Board of Trustees report which said:

"In view of the fact that oral polio vaccine will not be generally available in sufficient quantity in 1961 for any large scale immunizing effort, the Board of Trustees of the AMA strongly recommends that the medical profession encourage the widest possible use of the Salk vaccine for the prevention of poliomyelitis. The Salk vaccine has been proved to be effective and since there are still many segments of the population not immunized against poliomyelitis every effort should be made to encourage the general public to take advantage of the Salk vaccine without delay."

The Board report was amended to suggest that a proper committee be established by the AMA to study the problems involved in administration of the new oral polio vaccine and to establish guides for physicians to follow when they are approached by various groups and asked for their support in administering oral polio vaccine.

Miscellaneous Actions

In considering a wide variety of resolutions and annual and supplementary reports, the House also:

Approved continuing study and periodic reevaluation of the trend toward locating physician's offices in or adjacent to hospitals;

Directed the Committee on Medical Care for Industrial Workers to carry out its duties as previously instructed and to prepare guides for physician relationships with medical care plans in conformity with the clear policies already laid down by the House of Delegates;

Approved a set of guides relating to drug expenditures for welfare recipients;

Asked the Board of Trustees to study the question of blood replacement responsibility and also the matter of establishing health insurance fee schedules for surgical assistants;

Urged the Board to make every effort to reduce the number of physicians who are non-dues-paying members and approved a three-year study report on the relationships of physicians not-in-private-practice to organized medicine;

Requested the Board to present a completed retirement and disability insurance program for AMA members at the June, 1961, meeting, and

Agreed that the General Practitioner of the Year Award should be continued as at present.

The New March of Dimes Scheduled Nationwide for January

The National Foundation has reported, in a financial summary, that the state of West Virginia has been the principal beneficiary in the allocation of March of Dimes funds raised in the state over the past 23 years.

More than 65 cents of every dollar from West Virginia's March of Dimes has been put to use in aiding the state's disease victims. Of the remaining 35 per cent accruing to the national headquarters, a considerable amount also has come back to West Virginia in shipments of polio vaccine and gamma globulin and in other nationwide services conducted by The National Foundation.

The summary covers the period since the first March of Dimes was held in January, 1938, and compares the net total of funds raised in the state with amounts made available to West Virginia through September 30, 1960.

In this period, West Virginia chapters of the March of Dimes organization raised a net total of $5,650,700.80 at an average fund-raising cost of less than 7 per cent. Of this amount $3,678,771.68 has been available to the county chapters in carrying out their extensive patient aid programs, including advances of $1,359,664.63 from the national office to meet local emergency situations.

Over and above the 65 per cent used by county chapters in the state, The National Foundation has financed within the state projects such as the historic field trials which proved the effectiveness of the Salk vaccine, and epidemiological studies and scholarship or fellowship grants to West Virginia residents. National headquarters' expenditures for the vaccine trials in West Virginia amounted to $57,477.70. In addition the national office has sent into West Virginia $75,806.76 worth of Salk vaccine and 47,016 cc's of gamma globulin in support of its polio prevention programs.

The scientific research program which developed polio vaccines was financed by the national office's share of contributions.

Two years ago, the National Foundation for Infantile Paralysis changed its name to The National Foundation in expanding its areas of interests beyond polio to include birth defects and arthritis, using the scientific knowledge and experience gained in the fight against polio.

The New March of Dimes is scheduled for the month of January.

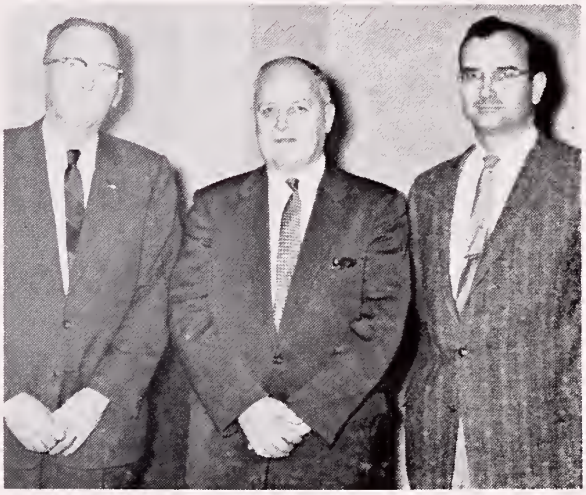
Local Societies Urged To Establish Medical Career Programs

The Public Service Committee of the West Virginia State Medical Association has urged component societies to establish programs to encourage high school students to pursue the study of medicine.

Following a meeting held in Charleston on November 17, the chairman of the committee, Dr. Charles L. Goodhand of Parkersburg, said that the members of the committee present agreed that the recruitment of intelligent young men and women into the field of medicine and allied specialties is of great importance to the profession.

Doctor Goodhand said that material pertaining to medical careers would be mailed to each component society to aid in the establishment of programs on the local level.

The committee emphasized the importance of close liaison between the public service committees on the state and local levels. It was also pointed out that the committees should seek the active cooperation of the Woman's Auxiliary.



Dr. Charles L. Goodhand of Parkersburg, center, chairman of the Public Service Committee of the West Virginia State Medical Association, is shown with two members of the committee, Dr. Everett H. Starcher of Logan, left, and Dr. John T. Chambers of Charleston.

Doctor Goodhand said that in addition to medical careers the committee will concentrate on the following fields of endeavor during the coming year: (1) Emphasizing the role of the physician as a good citizen, (2) Getting the message of medicine across to laymen, and (3) Making a complete analysis of the problems of aging on the local level.

Doctor Goodhand also urged that worthy public service programs undertaken by component societies be publicized in *The Journal* so that physicians throughout the state may be so informed and aided in the possible establishment of similar programs by their societies.

First Interim Progress Report Of WVU Teaching Hospital

An interim report concerning the development of the teaching and clinical programs at the West Virginia University Medical Center has been prepared for publication in *The Journal* by Dr. Kenneth E. Penrod, Vice President-Medical Affairs. The report follows:

Since opening on August 10, 1960, the growth and development of the University Hospital has exceeded even the most optimistic projections. As of the end of November a total of 396 patients had been admitted to the inpatient service, 667 had been seen in the outpatient department and 442 had been cared for in the emergency service.

A breakdown of statistics by month is given below:

	Aug.	*Sept.*	*Oct.*	*Nov.*
Patient Days	220	577	1344	2019
Admissions	27	86	116	167
Births			3	10
Discharges	12	51	102	142
Deaths		5	5	9
Autopsies		5	5	6
Outpatient Visits		107	208	352
Emergency Visits	63	82	128	173

As can readily be seen in this table, growth has been rapid in all segments of operation. During this period many new services and divisions have been opened, including neurosurgery and other surgical specialties, obstetrics and gynecology, pediatrics, physical therapy, etc. All of the major divisions but psychiatry are now in some stage of operation.

The geographic spread of patient origin is considerable. Not only have patients now been seen from 37 counties of West Virginia, but from Ohio, Maryland, Pennsylvania, Georgia, Kentucky, New York and Minnesota as well. Less than half of the patients to date have been from Monongalia County.

The highest daily census of the period reported was 89.

In terms of the teaching program in the Hospital, the third year students are finding both the number and variety of patients more than adequate. At the same time, due to the current staff limitations, they are enjoying a large amount of personal instruction. As expressed by Francis A. Goad of Clendenin, a member of the class who recently completed a 12-week clerkship in the Department of Medicine, "We enjoy many advantages not shared by the typical junior at a long-established medical school. One of the most important is our close association with department heads and other staff members. At present we have an opportunity to become proficient in some techniques earlier in our clinical studies than would be possible otherwise."

Members of the class are enthusiastic about the Hospital's excellent physical facilities, asserting that the up-to-date equipment contributes much to the learning process, as well as to the pleasure of obtaining a medical education.

With the rapid build-up of patient load some of the departments have found themselves somewhat understaffed at times. This was particularly true in pediatrics where Doctor Klingberg one day phrased it "I am the professor, the senior resident, the junior resident, the intern and the fourth-year clerk." However, some relief has been provided.

By January 1 several new staff members will be in residence in Morgantown ready both to extend and intensify the services available. Several new services and procedures, including open heart surgery, will be instituted shortly after the first of the year. Although no definite plans can be announced as of this date, it is hoped a psychiatry service can be opened soon.

All patients except those admitted as emergencies have been referred here by a physician. A sincere effort is being made, although slips have occurred, to keep the referring physician advised concerning his patient. Everyone at the Medical Center is aware of the importance of this communication and will welcome further inquiries from physicians if the report requires amplification.

Proposed Constitutional Amendment

The following amendment to the Constitution of the West Virginia State Medical Association, offered at the 93rd Annual Meeting at The Greenbrier in White Sulphur Springs, August 25-27, 1960, by James P. McMullen, M. D., of Wellsburg, Chairman of the Committee on Constitution and By-Laws, will be acted upon finally by the House of Delegates at the 94th Annual Meeting in 1961:

Article IX

Sec. 3—Amend the Section in line one by deleting the word "President."

(The effect of the amendment would be to eliminate the necessity of electing a president at each annual meeting. Section 2 of Chapter VI of the By-Laws provides that the president elect shall be installed as president as the final order of business at the last session of the House of Delegates at each annual meeting).

ACCP Cuban Relief Fund

At the meeting of the Board of Regents of the American College of Chest Physicians held in Washington, D. C. on November 28, 1960, a resolution was adopted to establish a relief fund for Cuban members of the College who have been exiled temporarily from their country. The Board of Regents voted to contribute $5,000 to launch the fund and contributions are being solicited from College members and others who are interested. The Cuban Chapter of the College was founded in 1940 and now has 74 members.

Contributions may be mailed to American College of Chest Physicians, 112 E. Chestnut Street, Chicago 11, Illinois.

Availability of Blood Derivatives At Red Cross Blood Centers

Dr. F. C. Hodges of Huntington, director of the Regional Blood Center of the American National Red Cross in that city, has indicated that many requests for information concerning the blood derivatives which may be obtained from the Red Cross blood centers are received in that office daily.

The following report concerning the availability of various blood derivatives was submitted by Doctor Hodges:

Serum Albumin

This is used as an intravenous injection in cases where the protein in the patient's blood drops to low levels. This frequently happens in severe burns when the burned area exudes a fluid rich in protein. This great loss may cause a dangerous drop in the blood protein level of the patient together with a concentration of the red blood cells. In such a case the administration of whole blood may cause a dangerous additional concentration of the patient's blood to such a degree that circulation may become impaired. In such cases the administration of serum albumin will restore the blood protein level without causing a concentration of the blood cells. There are other reasons for its administration, such as excessive loss of protein through the kidneys.

Serum albumin is supplied in vials containing 100 cc. of 2.5 per cent serum albumin liquid, which requires the amount of plasma contained in 4 pints of blood for its preparation. To help defray a portion of the cost of its production, a fee of $10 per vial is required by the Blood Center. No donation receipt is required. This product may also be obtained from drug supply houses.

Gamma Globulin

The greatest concentration of immune bodies is found in this fraction, hence it is administered to prevent several diseases, such as poliomyelitis, measles, hepatitis, and several others. Occasionally a person is found who has a congenitally low level, in which case the patient is very susceptible to all infections to which he is exposed; notably to repeated attacks of pneumonemia. In such cases arrangements can be made to supply the material in large amounts.

It is supplied in vials containing 2 cc. The dose will usually be from 2 cc. to 20 cc., or from 1 to 10 vials. This is supplied without cost through the various State Health Departments and without a donation receipt.

This product may also be obtained from drug supply houses.

Fibrinogen

This substance, which is one of the important factors in causing the blood to clot is not often used, but when it is, it is life-saving. Nothing else can take its place. Its most frequent use is found in mothers who have just been delivered followed by severe bleeding which will not stop even with massive blood transfusions. In such cases the intravenous administration of Fibrinogen in proper doses is followed by a dramatic stoppage of the bleeding.

It is supplied in large vials each of which contains about 2 grams of dried fibrinogen, to which water is added for its administration. From 2 to 4 grams are usually required. From 10 to 20 pints of blood are required to furnish enough fibrinogen for a single dose. This is supplied without cost and without a donation receipt. Inasmuch as the father is just about punch drunk with costs, with the hospital, drugs, doctors, nurses, etc., the Red Cross has decided that no costs at all shall enter into the supply of this material, in order that no mother be lost due to inability to pay for it.

There are two other products, both of which require the use of freshly drawn blood for their preparation.

Packed Red Blood Cells

These are prepared by drawing the plasma from the red blood cells which have been packed in the bottom while still in the original container. These may now be administered as in any other transfusion to patients who require blood but whose circulatory system is not in condition to tolerate a large amount of fluid. Also, some patients are allergic to whole blood and exhibit marked reactions when it is given. In such cases the administration of packed red blood cells either eliminates these reactions or renders them very mild. They should be administered within 24 hours after being separated, as their stability is far less than when suspended in plasma.

Fresh Frozen Plasma

This is prepared by placing freshly drawn blood in the centrifuge to separate the red cells rapidly from the plasma. This plasma is withdrawn and immediately frozen, in which state it is kept until it is thawed for use in cases of hemophilia or "bleeders." When this frozen plasma is sent from the Blood Center, it is packed with dry ice to maintain its frozen state until used, as the substance responsible for stopping the bleeding rapidly loses its effect even upon a short period of thawing.

The fee for each of these products is $2.50 per unit—the same as that for blood, to help defray a part of the cost of production.

A very recent addition to these products is Vaccinia Immune Globulin (V.I.G.) which may be life-saving in patients who develop very severe and generalized reactions to smallpox vaccination. This may be obtained free of all charges. Upon application to this Center, you will be advised as to the nearest Center where this may be obtained.

ACP Plans Post-Convention Cruise

A post-convention cruise to the Caribbean has been planned by the American College of Physicians following the annual meeting of that organization in Miami Beach, Florida, May 8-12, 1961.

Seminars, demonstrations and lectures will be presented during the 8-day cruise, and optional visits to medical facilities have been planned.

Further information concerning the cruise may be obtained by writing Mr. Leon V. Arnold, 33 Washington Square, West, New York 11, New York.

Sub-Committee on Athletics Named By School Health Committee

A sub-committee on athletics was set up within the State Medical Association's School Health Committee at a meeting held in Charleston on November 17. The chairman, Dr. W. W. Currence of South Charleston, subsequently named the following as members of the committee: C. Carl Tully, M.D. (general practice), chairman; Henry M. Hills, Jr., M.D. (orthopedics); and Carrel M. Caudill, M. D. (neurology), all of Charleston; Mr. Leon McCoy, football coach at Charleston High School, Charleston; and Mr. Robert Rule, Physical Fitness Director, YMCA, Charleston.

Five members of the School Health Committee of the State Medical Association attended a meeting of that committee in Charleston on November 17. Left to right, Dr. W. W. Currence, South Charleston, chairman; and Drs. Charles W. Merritt, Beckley, Merle S. Scherr, Charleston, Grover C. Hedrick, Jr., Beckley, and Leo H. Mynes, Charleston.

The committee will consider approval of a representative form for school health examinations, and will probably make a recommendation for the adoption of a more complete form than is in use today.

The committee agreed to cooperate fully with the State Department of Health and the Department of Education on both state and local levels for the purpose of helping to improve school health activities.

It was recommended that a representative of the following groups be asked to work with the two Departments in order to accomplish the aims of the committee:

Division of Crippled Children, DPA; West Virginia State Dental Society; Bureau of Public Health Nursing, State Department of Health; Congress of Parents and Teachers; Nutrition Bureau, State Department of Health; and the Department of Mental Health. An accountant and a representative county health officer will also be asked to serve with the group.

Besides the chairman, the meeting was attended by Drs. Merle S. Scherr and Leo H. Mynes of Charleston, and Drs. Grover C. Hedrick and Charles W. Merritt of Beckley.

Dr. Richard L. Meiling Named Dean Of Ohio State Medical School

Dr. Richard L. Meiling of Columbus, Ohio, has been named Dean of the Ohio State University College of Medicine, effective January 1. He succeeds Dr. Charles A. Doan, who becomes Dean Emeritus.

In addition to the deanship, Doctor Meiling will serve as director of the University Hospital and its ancillary facilities, professor of obstetrics and gynecology, and professor of preventive medicine in the field of aviation medicine. He has served as associate dean since 1951.

Doctor Meiling is well-known to many West Virginia physicians and he has contributed several scientific articles to *The Journal*. He is a past president of the Ohio State Medical Association and has served for five years as a member of the AMA House of Delegates.

He is a native of Springfield, Ohio, and was graduated from Wittenberg College in that city. He attended Jefferson Medical College and received his M. D. degree from the University of Munich in Germany. He interned at University Hospital in Columbus and served a residency in obstetrics and gynecology at Cleveland City Hospital.

He served with the Medical Corps of the United States Air Force during World War II and the Korean conflict, and holds the rank of Brigadier General in the Reserve Medical Service of the Air Force.

Special Meeting of Ob. & Gyn. Society Held in Charleston, Dec. 2-3

A special meeting of the West Virginia Obstetrical and Gynecological Society was held at the Charleston Memorial Hospital in Charleston on Friday afternoon, December 2, and Saturday morning, December 3, 1960.

Dr. Nicholas W. Fugo, professor and chairman of the Department of Obstetrics and Gynecology, West Virginia University School of Medicine, was the first speaker on the program. He discussed "Amenorrhea-Adolescent" and "Induction of Labor."

A paper on the subject of "Placenta Accreta" was presented by Dr. A. J. Villani of Welch, who also submitted a report on "Central Placenta Previa with Partial Placenta Increta."

The third speaker was Dr. Jack Pierce of Williamson, who spoke on the subject of "Conservative versus Radical Treatment of Postpartum Atonic Bleeding."

Dr. D. A. Mairs of Charleston reviewed one hundred cases where the culdoscope was used in the diagnosis of pelvic conditions.

Following a social hour on Friday evening, dinner was served at the Edgewood Country Club. Doctor Villani was the guest speaker and his subject was "Prenatal Tidbits."

Dr. John T. Chambers of Charleston, president of the Society, presided at a short business meeting following the dinner. The dinner meeting was attended by more than 40 members, their wives and guests.

Our Advertisers: An Appreciation

At the close of the year 1960, we pause to reflect upon the quality of material submitted by our advertisers for use in The West Virginia Medical Journal. All through the year, we have been receiving compliments from our readers, particularly members of the medical profession, on the attractiveness of the advertising pages of our publication. In addition, valuable information is being supplied continuously concerning products manufactured by drug and accessory houses over the country. We have received favorable comments concerning the continued use of color in our advertising pages, and the black and white pages are more and more including illustrations with text. Considered as a whole, a vast improvement is noticeable in advertisements appearing in The Journal today as compared with just a few years ago.

The public is undoubtedly health conscious and our advertisers deserve much credit for presenting the story of their products in a manner that is not only pleasing, but valuable to the members of the medical profession.

Our sincere thanks to our many advertisers for the vast volume of advertising placed with us during the past year. Our clients, their agents, and local representatives have gone out of their way to supply material that is acceptable to our members. We wish for them all continued success throughout the New Year.

The West Virginia Medical Journal

Charleston, W. Va.
December 19, 1960

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Dr. Lowell T. Coggeshall Receives Pharmaceutical Mfrs. Award

Dr. Lowell T. Coggeshall, Vice President and Professor of Medicine at the University of Chicago School of Medicine, was selected as the recipient of the 1960 Pharmaceutical Manufacturer's Association's Annual Award for outstanding basic contributions in medicine. Presentation of the award was made at a regional meeting of the PMA in New York City on December 13.

Doctor Coggeshall was cited for achievements ranging from attainment of an international reputation as an expert in tropical diseases to supervision of unprecedented expansion of his University's medical education, hospital, clinical and research activities.

He is a past president of the American Cancer Society, the Association of American Medical Colleges and the American Foundation for Tropical Medicine, and a former special assistant to the Secretary of Health, Education and Welfare.

New Association Members

Dr. Thomas F. Alderman, Man Memorial Hospital (Logan). Dr. Alderman, a native of Seneca Falls, New York, was graduated from Rockhurst College, Missouri, and received his M. D. degree from the University of Tennessee College of Medicine in 1957. He interned at St. Thomas Hospital in Nashville, Tennessee, 1957-58, and was licensed to practice in West Virginia in 1959.

* * * *

Dr. William E. Christie, Jr., The Golden Clinic, Elkins, (Barbour-Randolph-Tucker). Doctor Christie was born in Brockton, Massachusetts and received his M.D. degree from Harvard Medical School in 1950. He interned at St. Mary's Group of St. Louis University, 1950-51, and served a residency at the Virginia Hospital in Memphis, Tennessee, 1953-55. He also served as a Fellow in gastroenterology at the Lahey Clinic in Boston. He served with the Medical Corps, USMCR, 1943-46, and 1950-53. He was formerly located at Ventura, California and his specialty is internal medicine and gastroenterology.

* * * *

Dr. Gerald J. Gelford, Webster Springs (Central West Virginia). Doctor Gelford, a native of Bayport, Minnesota, received his M.D. degree from the College of Medical Evangelists in 1955, and interned at Washington Sanitarium and Hospital, 1955-56. He served residencies at the U. S. Naval Hospital in San Diego, California and at the Washington Hospital Center. He served with the Medical Corps of the U. S. Navy for two years and was licensed to practice in West Virginia in 1960. His specialty is radiology.

* * * *

Dr. Marion M. Malinowski, Grantsville (Parkersburg Academy). Doctor Malinowski, a native of Prezemysl, Poland, received his M.D. degree from the University of Trinsbruck, Austria, in 1950, and interned at Fairview Park Hospital in Cleveland, Ohio, 1951-52. He served residencies at Charleston General and Charleston Memorial hospitals, 1954-59, and was licensed to practice in West Virginia in 1953. His specialty is general surgery.

* * * *

Dr. Melvin C. Reinhard, Jr., Golden Clinic, Elkins (Barbour-Randolph-Tucker). Doctor Reinhard was born in Buffalo, New York, and received his M.D. degree from the University of Buffalo School of Medicine in 1951. He interned at Deaconess Hospital in Buffalo, New York, 1951-52, and served a residency at the same hospital, 1953-56. During World War II, he served as a Sergeant in the United States Army. He formerly practiced his specialty of radiology in Saudi Arabia.

Medical Meetings, 1961

The following is a partial list of national, state and district medical meetings scheduled for 1961:

Jan. 9-11—Medical Licensing Board, Charleston.
Jan. 26-29—Cardiovascular Seminar, Jacksonville, Fla.
Mar. 6-8—New Orleans Grad. Med. Assembly, New Orleans.
Mar. 6-9—S. E. Surgical Congress, Miami Beach, Fla.
Mar. 12-17—American College of Allergists, Dallas, Texas.
Apr. 6-8—W. Va. Acad. Oph. and Otol., White Sulphur Springs.
Apr. 10-12—Am. Acad. Pediatrics, Washington, D. C.
Apr. 14-15—W. Va. Chap. ACS, White Sulphur Springs.
Apr. 17-20—AAGP, Miami Beach, Florida.
Apr. 21-22—W. Va. St. Soc. Med. Technologists, Wheeling.
May 8-12—Am. Coll. Physicians, Miami Beach, Fla.
May 19-21—W. Va. Chap. AAGP, Civic Center, Charleston.
May 22-25—Am. Urological Assn., Los Angeles.
June 22-26—ACCP, Hotel Commodore, New York City.
June 26-30—Annual Meeting, AMA, New York City.
Aug. 24-26—W. Va. St. Med. Assn., The Greenbrier, White Sulphur Springs.
Oct. 2-6—Am. Coll. Surgeons, Chicago.
Nov.—Southern Medical Assn., Dallas, Texas.
Nov. 28-Dec. 1—AMA Clinical Meeting, Denver.

Rural Health Study Conference in Chicago

The Third National Study Conference, sponsored by the Council on Rural Health of the American Medical Association, will be held at the Palmer House in Chicago, February 3-4. The theme for the meeting will be "Information versus Misinformation."

More than two hundred persons are expected to attend the two-day meeting. The conferees will be key representatives of state medical associations, national and state rural organizations, agricultural extension services, farm bureaus and health departments.

Spring Congress at Gill Memorial Hospital

The 34th Annual Spring Congress in Ophthalmology and Otolaryngology, sponsored by the Gill Memorial Eye, Ear and Throat Hospital in Roanoke, Virginia, will be held in that city, April 3-8. Twenty prominent physicians will appear as guest speakers.

Further information concerning the program may be obtained by writing to Dr. E. G. Gill, 711 South Jefferson Street, Roanoke, Virginia.

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An Approach to the Retarded Child and His Family*†

Weston M. Kelsey, M. D.

Many physicians do not have a systematic method for approaching the retarded child and his family. Because the majority of retarded children cannot be cured at the present time, there is a tendency to disregard the occasional child who can be helped. The physician frequently forgets that while oftentimes he has no specific treatment for the retarded child, he can help its family. If he is to help either the child or the family, he must put forth every effort to make a specific etiologic diagnosis. Without this knowledge, it is difficult to talk intelligently with the parents, impossible to institute appropriate therapy, or to relieve the parents' misapprehension concerning their responsibility for the child's retarded state.

The Author

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Diagnostic Problems

The most effective period for therapy in these cases is during infancy. For this reason, the diagnosis should be established as early as possible. Since the diagnosis usually is made because the child has varied from a normal developmental pattern, it is important to consider developmental patterns briefly. Those which will be mentioned are patterns I have found useful. Since variations in normal development are great, it is well to be cautious about discussing the possibility of retardation with the parents. In the case of the child under age 2, I have found that it is wise not to raise the possibility of retardation unless the developmental quotient is at most 70 per cent of average or lower; in the first year of life a 50 per cent basis might be wise.

Diagnosis of retardation in the newborn, except for gross physical changes such as anencephaly or mongolism, is difficult. The newborn that is extremely lethargic, that fails to have a sucking reflex or other normal reflexes, certainly is worrisome. These findings are not sufficient to bring the possibility of mental retardation to the parents' attention. The infant who does not hold up his head by the age of two months, when lying in the prone position, probably is abnormal. It is likewise worrisome if, at the same age, the infant is not noticing his parents and is not smiling in response to their attention. The infant who does not sit alone by eight months of age should be studied. The infant who does not walk alone by 15 months of age deserves investigation.

Decision about the normality of speech is difficult. Certainly, an infant who does not say 10 to 12 words clearly by 18 months of age and who does not put words together by the age of two years is deviating significantly from normal. It must be emphasized that these performances should be confirmed by the physician since frequently parents will project their wishes rather than the actual performance of the child.

The physical examination frequently is of help but may be difficult to record objectively. The "vacant" appearance of a small infant, or the bizarre behavior of the older child may make the doctor suspect trouble. Marked microcephaly is significant. Unequivocal neurologic abnormalities such as pathologic reflexes, spasticity, or other signs of upper motor neuron lesions strongly suggest the possibility of mental retardation. A

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small percentage of children may have significant involvement of the motor cortex without other cerebral disease.

Other Confusing Conditions

It must be emphasized that delay in development does not mean *a priori* that the patient is mentally retarded. Common problems which can be confusing are those of cerebral spasticity without mental retardation, blindness, deafness, dislocated hip, spinal cord lesion, disease of the muscular system and, rarely, specific speech defect. One of the most interesting and difficult problems is that of the "floppy" baby.[1] These children are retarded in their physical performance. In contrast to their motor function, they are alert, are interested in their surroundings, and give the impression of being bright. They usually improve rapidly at 18 months of age and by three years of age are performing within normal limits.

A patient who has multiple seizures such as simple staring spells which occur 50 times or so a day, may appear to be retarded, yet, when the seizures are controlled, be obviously intellectually normal. Rarely, emotional disturbances may cause what appears to be retardation. These usually are the result of marked overprotection so that the infant or child does not need to perform well in order to get along in the world. Most of these patients eventually turn out to have specific organic problems.

Finally, a word should be said about the use of the formal intelligence test, such as the Stanford-Binet. In the first place, the value of this test and others similar is dependent upon the desire and ability of the patient to take the test. If he is uncooperative, tired, sick, or if he does not like the examiner, the test has little if any validity. Unless the examiner is an expert, certain specific organic defects will produce an invalid result. Interpretation of these factors is the responsibility of the examiner.

Once the physician has decided that the retardation is significant and is not due to one of the previously mentioned organic deficits, he should ask himself three questions: 1. Does the child have a disease which can be treated specifically? 2. Does the child have a disease which, if it appears in a subsequent sibling, can be treated if diagnosed early? 3. In what way can the family be helped in the adjustment to its problem?

Six disease processes which produce mental deficiency and for which the patient can be treated, with preservation of normal intellectual function, immediately come to mind. They are hypothyroidism, galactosemia, phenylketonuria, hyperbilirubinemia, infantile hypoglycemia, and generalized cranial synostosis. Regardless of all teaching on the subject of hypothyroidism and the importance of making a diagnosis when the infant is less than six months, preferably less than four months, of age, diagnosis in this age group remains uncommon.[2] Let it be emphasized once more that in the case of any infant who fails to grow, with development of severe constipation, who has carotenemia, and whose skin is grey and cool hypothyroidism should be suspected. In this age group the two most helpful laboratory aids are the PBI (provided no iodine has been given the child) and the bone age. Since approximately 10 per cent of these infants have goitrous cretinism, the I^{131} uptake may not be helpful and at times the PBI may not be as low as is seen in sporadic cretinism. Galactosemia can be treated relatively easily.[3] The commonest mistake made in the diagnosis of galactosemia at the present time is because the glucose oxidase test is being used commonly for the detection of reducing substances in the urine. Since the test is specific for glucose, galactosemia will be missed. For this reason, the urine of all such infants should be tested with a copper-reducing substance. It is interesting that these patients may present with a picture of the nephrotic syndrome in infancy.

Phenylketonuria is a rare condition, but there is increasing evidence that if it is recognized in the first few months of life mental retardation can be prevented.[4] Since the development of a simple test, the Phenistix,® for this purpose, there is little excuse for failing to make the test in any infant with suspected retardation. It has been recommended that it be carried out in every infant of the age of a month. The test may be negative in the first weeks of life. Whether this is feasible at the present time is a matter for argument. There seems to be little question that a large number of infants with hypoglycemia of various types may be helped.[5] For this reason, it is wise to obtain blood sugars on any convulsing infant under a year of age, with the hope that the rare case of infantile hypoglycemia may be found.

Although hyperbilirubinemia is well recognized as a cause of kernicterus and mental retardation, it is surprising how frequently damaging levels of bilirubin still are permitted to develop in the newborn.[6] It is not generally recognized that Rh incompatibility accounts for only 50 per cent of cases of hyperbilirubinemia of the newborn. For this reason, the only way hyperbilirubinemia can be detected is by careful observation in the newborn nursery. Exchange transfusion remains the therapy of choice and probably should be done only where there are adequate facilities, since the procedure's mortality rate still is high.

Generalized cranial synostosis is exceedingly rare.[7] Because this diagnosis implies increased intracranial pressure, the symptoms are those associated with any form of such pressure. In these cases there is vomiting, and papilloedema develops in the first months of life. Once the diagnosis is established, immediate operation is imperative.

New Disease Associates

Two recently described diseases associated with mental retardation are infantile hypercalcemia and maple sugar disease. The syndrome of hypercalcemia is that of rather an elfin-appearing infant who fails to thrive.[8] Appropriate chemical studies reveal hypercalcemia, which may be treated with some degree of success. Maple sugar disease is a disease of metabolism, first recognized when brothers with mental retardation were discovered to have urine that smelled like maple sugar or syrup.[9] It has been found that the disease is caused by an abnormality of amino acid metabolism, and there is reason to hope that appropriate dietary therapy will help these children to the same extent as that enjoyed by the phenylketonuria patients. In these two diseases, evidence that treatment will prevent mental retardation is not as strong as it is in the six diseases first outlined.

Seizures

The matter of seizures calls for serious thought. Control of the frequent minor seizures may allow the patient to function normally. It is the occasional case of the patient with repeated seizures who may have an hypoxic episode causing severe cerebral damage that causes us real concern. For this reason, control of repeated seizures may well prevent development of later retardation. An all-out effort should be made to care for the patient with seizures.

If the retarded patient cannot be helped because of a delayed diagnosis, it should be recognized that certain of the hereditary diseases can be helped if treated early. Therefore, if one sibling has goitrous cretinism, galactosemia, phenylketonuria, or maple sugar disease, the subsequent sibling should be observed carefully from birth so that a disease state, if present, can be discovered early, and deterioration prevented.

I feel that the physician frequently is of greatest help to the family in his discussion of mental retardation. In talking about a retarded child, the most important thing is to help parents develop insight with regard to the status of their child. If they are able to recognize the problem, management is relatively simple, but until they do recognize the fact that the child is retarded, further discussion is useless. A pamphlet illustrating development pictorially and put out by Ross Laboratories may be given parents who do not appreciate the fact that their child is retarded. They are asked to look it over carefully and to compare their child's performance with that illustrated. At the next visit they are asked to fit their child into the appropriate developmental age. This technique has been most helpful in getting parents to accept the fact of retardation, and to talk about it. Discussion is then turned to the etiology, the prognosis, possible therapy, and the problems of home care versus institution care. If there is a clear-cut etiology, this can be discussed. In the great majority of cases, no etiology can be found. It is striking to note the number of parents who blame themselves as causes of the child's difficulty. The most common reason for this guilt complex lies in the use of the term "birth injury" by the physician. To the parent this means that the child was injured physically at birth. They assume, therefore, that if they had been able to get a better doctor this "injury" might have been avoided. It has been found that the term "defective brain" has not implied an active cause of the trouble. Every attempt is made to find other congenital abnormalities in the child so that one can point out that the trouble was due to defective development during the period of gestation. The physician should make certain the parents understand that nothing they did was responsible for the defective development. I know of no good that has resulted from telling parents that their child's trouble was the result of their misdeeds during gestation or was caused by poor medical care.

Points on Prognosis

In giving a prognosis, one should be most cautious. Attempts should be made to explain how one arrives at the degree of retardation and why it is that parents, by following a developmental pattern, can estimate for themselves the degree of retardation as time passes. It is most important that they realize the child's performance will improve at one rate or another unless there is retrogressive cerebral disease. Many parents have the idea that if the child is performing at a two-year level, it will never do any better. If the parents accept a developmental quotient of 50 in a one-year-old child, one can point out to them that at two years the child should be performing at a one-year level. It can be further shown that if the 50 per cent level holds over a four or five-year period, we have a fairly useful index of the child's ultimate performance. There should always be some room left for variation, since the

estimation of performance at any time is not accurate.

Discussion of institutionalization depends on several factors. In many areas there are no public institutions for patients under six years of age. For this reason, recommending such care to most parents is merely a frustrating experience. The cost of care in a good, private institution is so high that it is the exceedingly rare patient who is privileged to benefit therefrom. The matter, therefore, is not even discussed unless public facilities are available, or the parents are financially able to afford private care, or if they bring the subject up themselves. When facilities are available, the main reason for institutionalization is that the defective child is disrupting the home. One such example is the destructive retarded child; another is where the mother works and is unable to find someone to take care of the retarded child. Still another example might be where so much effort is necessary to take care of the retarded child that the other members of the family, both father and children, are deprived of a normal home life.

Summary

An outline of an approach to the retarded child and his family is presented. Emphasis is placed on features which have been of particular importance to the author. With the extensive interest and the increased research in this field, progress undoubtedly will be made in finding specific forms of retardation which will prove amenable to therapy. Meanwhile, there is every reason to exhaust all possible means in the diagnosis of those forms of mental retardation now amenable to therapy and to educate the family faced with the problem of the retarded child in such way that an adjusted family life is possible.

References

1. Greenfield, J. G., Cormman, T. & Shy, G. M.: The Prognostic Value of the Muscle Biopsy in the "Floppy Infant," Brain 81:461, 1958.
2. Smith, D. W., Blizzard, R. M. & Wilkins, L.: The Mental Prognosis of Hypothyroidism of Infancy and Childhood. Review of 128 Cases. Pediatrics 19: 1011, 1957.
3. Donnell, G. N., Bergren, W. R. & Cleland, R. S.: Galactosemis, Pediat. Clin. North America (May) 1960, pp. 315.
4. Knox, W. E.: An Evaluation of the Treatment of Phenylketonuria with Diets Low in Phenylalanine, Pediatrics 26:1, 1960.
5. Haworth, J. C. & Coodin, F. J.: Idiopathic Spontaneous Hypoglycemia in Children, Pediatrics 25: 748, 1960.
6. Allen, F. H., Jr. & Diamond, L. K.: Prevention of Kernicterus; Management of Erythroblastosis Fetalis According to Current Knowledge, J. A. M. A. 155: 1209, 1954.
7. Ingraham, F. D., Alexander, E. & Matson, D. D.: Clinical Studies in Craniosynostosis, Surgery 24:518, 1948.
8. Smith, D. W., Blizzard, R. M. & Harrison, H. E.: Idiopathic Hypercalcemia, Pediatrics 24:258, 1959.
9. Dancis, J., Levitz, M. & Westall, R. G.: Maple Syrup Urine Disease, Pediatrics 25:72, 1960.

The Science and Art of Medicine

There is no place in Medicine for those not on battle bent. There is no place for sluggards or cravens. Physicians serve life, and life is itself a struggle—a struggle for survival that begins for each of us in the process by which we are conceived, and that continues, through varying phases, until the dramatic hour when finally we succumb, as succumb we all must, not because of the failure of Medicine to protect us but because of the inexorability of the law within our nature which dooms us all to die.

To one who realizes that struggle is essentially inseparable from life, that the state of health represents the body's triumph over the constant threats and aggressions of disease, it is disconcerting almost to the point of violence to be confronted with the unrealistic and disarming philosophy that "easy does it" . . . that without the expenditure of effort, without work, we can still develop and enjoy the good things of life and of living. Nothing is further from the truth.

On the contrary, the whole history of mankind demonstrates that every achievement in art or science, every improvement in the lot of man, every advance in civilization and cultural refinement has been in direct proportion to the constructive hard work of people consistently striving to make the most of their best. The only thing that man can do easily is to fail. To convince him otherwise is to subvert his reason, to act in enmity against him, and to bring him ultimately to misery and to ruin.—Jesse McCall, M. D., in Journal, Med. Soc., New Jersey.

Infant Feeding*

McLemore Birdsong, M. D.

THE purpose of this discussion is to outline a practical, everyday feeding program for the infant, to examine some of the problems encountered, and to outline a method of handling them.

Everyone whose practice involves handling infants has his own method of feeding and, as a rule, it has changed some from time to time because of new "fads" and because of experience. On the whole, it has been successful. Except in groups and clinics, almost everyone has his own little routine. Because in most cases it has been successful it is doubtful that any one routine necessarily is the best.

Solid Foods Early Trend

Recently there has been much emphasis on very early introduction of "solid" foods to the infant diet. These "solid" foods, however, have been in the form of mushes and purees. There are advocates of beginning meats, vegetables and egg yolk in the diet of infants in the first weeks of life. The amazing point is that the infant does very well on such a program. It would seem that all this simply shows how tough the human infant is.

On the other hand, allergists have been able to show that very early administration of varied foods tends to increase the incidence of allergic manifestations in infancy and they therefore feel that varied foods should be delayed. Several years ago the American Academy of Pediatrics investigated the trend in infant feeding and noted a tendency to introduce varied foods earlier. Opinions of many of the top investigators and teachers in pediatrics were obtained and the majority held that with the exception of vitamins C and D, and the addition of iron, milk was an adequate food for infants for the first six months of life, and most recommended caution in the early beginning of other foods.

Anyone engaged in a practice involving infants knows that many crying babies can be made happy by the addition of foods to the usual milk consumption. Consequently, in the past 10 years there has been a trend toward earlier feeding of "solid" foods to infants to the point that there is noted a great increase in allergic conditions. Unfortunately, some physicians seem to be pushed into early feeding for "social reasons." By this, we mean a friend of his patient also has a baby about the same age and since that baby is on such-and-such food, he is confronted with a "hurt" new mother asking is there something wrong with her baby that he is not getting these foods? Rather than go into a long dissertation to explain the situation to the mother, foods usually are started whether the baby needs them or not. Fortunately, this is not malpractice.

It would seem that since all babies do not grow at the same rate and since there is wide difference in time of ready acceptance of new foods, the physician must use his common sense and not adhere strictly to a routine, but vary it according to the needs of the patient. When there is rather marked difference of opinion among capable observers concerning the timing of beginning new foods, it probably is wise for the average physician to go to neither extreme but to take a course somewhere "down the middle."

Breast Feeding

Breast feeding has become a major issue in pediatric practice. It seems we were doing very well for a while, when suddenly some of the child psychologists came forth with the idea that not to breast feed a baby was the cause of many of our social problems. Immediately, the lay magazines that aim their material at young women were crammed with such articles. The result is that many normal young women feel like outcasts unless they successfully breast feed their babies.

There is common agreement that breast milk has no equal as a food for young infants, and certainly physicians should encourage and help a mother to successfully breast feed her infant. If this is not practical, however, we are also well aware that there are many formulas that have

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been used successfully in rearing young babies. If there are no stigmata attached to the non-breast-feeding mother, I am convinced through many years of experience, that a completely socially adjusted mother and child can and will result from the bottle feeding routine. It is important that the bottle fed infant be held in its mothers arms in order that he may get the same closeness that he would have if he were breast fed. There is definitely more to feeding than the filling of the infant's stomach. He needs the closeness, the warmth, the tender care, and the satisfaction he gets best from the love of his own mother.

It is not in the realm of this discussion to go into the points of successful or nonsuccessful breast feeding but I do think that the obligation of our modern woman, from a social and financial standpoint, has greatly changed the feminine position in our present world. Women are expected to be housekeepers, social secretaries, club women, church workers, civic helpers, sometimes breadwinners, cooks, glamour girls and, in addition, old fashioned mothers. This is a mighty big job and in our modern society relatively few young families have domestic help. These, I think, are the most important reasons for unsuccessful breast feeding.

The Mathematical Formula

Many of us remember the era of the carefully calculated caloric formula. Those in medical school in that period remember the mathematics necessary to figure the calories, protein, fat, and carbohydrate and water for a given baby's formula. While the knowledge of caloric requirements, water needs, and daily protein intake is necessary in some severe nutritional conditions, it usually is not necessary in the everyday feeding of the normal infant. It is well known that one and one-half to two ounces of cow's milk per pound of baby weight will satisfy the protein requirement of the average baby; also, that most infants need from 45 to 50 calories per pound of body weight per day. We, of course, know the caloric value of milk and the various sugars. The knowledge is important in unusual cases and can be helpful. I doubt, however, if many of us know the caloric value of spinach, green peas, egg yolk, or the usual cereals. Another very practical point is that the infant does not know about this either and regardless of how accurate the physician may be in calculating a feeding routine, the infant's only response is that he is satisfied or he is hungry, or he is being overstuffed. Consequently, the only common sense approach is: (1) Make sure the formula is well prepared and clean, (2) that the infant is allowed to take as much as he pleases provided his rate of growth is satisfactory, (3) that additional foods are added in an approved manner and (4) allow the infant to worry about his caloric intake.

It is extremely rare that we see a baby that will overeat. The improper use of the written feeding instruction slips giving the amount and time both of formula and baby foods is one of my pet peeves. These are usually given the mother as time-saving gimmicks but many times they backfire badly. This type of advice does not take into consideration the difference in babies. Babies are not machines but are human beings and are subject to the many variations of adults. They are not necessarily as hungry at one time as they are at another. If such a program is given a young, inexperienced mother, there frequently is going to be trouble. If the slip reads 5 oz. of formula and the baby takes it and is still sucking, frequently because it is written in the form "5 oz.," that is all he will get; if the baby takes 4 oz. well and seems not interested in more, again, the slip reads "5 oz.," and most often the last ounce is forced down the poor infant's throat. This frequently is followed by vomiting or colic, or both, from overfeeding. As you all know, this is no problem with the experienced mother, as she has enough sense not to pay any attention to the doctor's instructions anyway. The above is stated in light manner for emphasis; however, it has been a frequent cause of feeding problems referred to me. A physician will save himself a lot of time on the telephone by spending a little more time in his office explaining to the mothers the variations in feeding habits of infants.

The Vitamins

Milk or breast milk is a complete food for the infant the first few months of life. Vitamins usually are the first addition to his diet. Except in the premature infant, vitamins may be started within the first month of life. Regardless of the claims of the many companies making vitamins for infants, the only additional vitamins needed are C and D. Under ordinary conditions, 25 to 30 mg. of vitamin C and 400 to 800 units of vitamin D are the proper intakes of these materials. Excessive amounts of vitamin D may be injurious. All the other vitamins are well supplied by the adequate intake of a proper diet. In my opinion, the vitamin product that contains all of the known vitamins has no place in normal infant feeding.

The iron supply of the normal infant will become deficient in the first 3 to 4 months of life. Consequently, iron in some form should be added to the diet early. Iron may be given in prescription form or, probably better, in the diet of the infant. As you well know, cereals, meat,

egg yolk, and some formulas contain iron in varying amounts. In most conditions, again, adequate and proper diet will contain all the iron necessary for proper hemoglobin formation. It is important that the mothers be warned that milk is not a complete food and, although they may grow well on it alone, serious iron deficiency anemia develops unless varied and proper foods are properly taken.

In Tables 1 and 2 you will see the outline of a feeding schedule. This schedule is followed, more or less, by the Department of Pediatrics at the University of Virginia. It has been used, with minor variations, for many years, and while by no means is the only or the best schedule, we can say that it has been successful, as many thousands of infants have thrived on the routine.

ROUTINE FEEDING SCHEDULE FOR NORMAL INFANT

	6 A.M.	10 A.M.	2 P.M.	6 P.M.	10 P.M.	2 A.M.
0-1 mo*	Milk	Milk	Milk	Milk	Milk	Milk
1-2 mo*	Milk	Milk Cereal	Milk	Milk Cereal	Milk	——
2-3 mo*	Milk	Milk Cereal	Milk Egg yolk Fruit	Milk Cereal	Milk	——
4 mo*	Milk	Milk Cereal Egg yolk	Milk Fruit Veg.	Milk Cereal Veg.	Milk	——
5-6 mo*	Milk	Milk Cereal Egg yolk	Milk Fruit Veg.	Milk Cereal Veg. Meat	——	——

*Vitamins

Table 1

ROUTINE FEEDING SCHEDULE FOR NORMAL INFANT

	Breakfast	Lunch	Dinner
7 mo*	Milk Whole egg Bacon Cereal	Milk Fruit Vegetables Dessert	Milk Meat Cereal Dessert
8-10 mo*	Add Cooked cereals Fruit	Add Starchy foods	
10-12 mo*	Add table foods or chopped foods.		

*Vitamins

Table 2

In giving advice to our mothers we emphasize that all foods should be started in small amounts and increased gradually to that amount which satisfies the baby. We never state specific amounts to be given. We recommend the introduction of simple foods singly instead of the mixed foods. In this way we can determine with some accuracy the foods to which the infant may be allergic.

We firmly believe that breast milk is the food of choice for infants but where artificial feeding is necessary, an evaporated milk formula with added carbohydrate has been used by us for 25 years or more. Our routine evaporated milk formula consists of 12 oz. of evaporated milk, 18 oz. of water, and 1½ oz. of Karo syrup or one of the other manufactured sugars. We do not change our formula with age. We keep the same dilution of milk and water and vary the carbohydrate, depending on the stools and the weight gain of the infant. Our infants are taken off formula at about 6 months of age and put on whole cow's milk

The Prepared Formula

There are many excellent prepared, canned or dried milk formulas that are suitable for infant feeding. While many of the products have minor variations, and many are made to simulate breast milk, we have found most of them to be excellent and to fulfill the nutritional needs of the infant. We have not found that any one product is the answer to all of the problems of infant feeding, as one might be led to believe after listening to a wide-awake detail man. The prepared formulas have the advantage of being complete, sterile and convenient but on the whole, are more expensive than the home-made.

It will be observed that the schedule calls for a 4-hour feeding routine. This by no means signifies that we believe in an absolutely rigid feeding schedule. In most situations, however, a regular schedule is to the mother's advantage. Because of the need for some routine on which to run her household, the mother finds it helpful to know within reasonable limits the hours at which time must be taken to feed and care for the baby. We recommend, therefore, that a regular schedule be urged but not forced. After the first weeks of getting adjusted most babies will settle on a four-hour schedule and we encourage our mothers to help the baby do so. We do not believe in a completely demand-feeding schedule when the baby gets out of hand. While we firmly believe babies have their "rights," we believe also that mother and father have their "rights." If the baby should awake early we advise that he be made comfortable by changing the diaper and, if necessary, changing the position and even offering a little water, then put back in his crib. If the baby quiets down for a while, this is fine; if, however, he continues to cry and is abnormally hungry, we believe in feeding him. We do not like for a baby to cry because it is hungry.

While the schedule may vary in different infants, most will find a suitable schedule in a few weeks. We never have our mothers awaken an infant in the middle of the night for a feeding except in very unusual conditions. We believe in demand-feedings from the usual 10:00 P. M.

feeding to the 6:00 A. M. feeding. This, we feel, is the quickest way to eliminate the middle-of-the-night feeding.

Around the fourth month of life, most infants will eliminate the 10:00 P. M. feeding. The mothers are instructed not to awaken the baby but to see if it will sleep through the night. If the baby should get hungry during the wee hours of the morning, we advise that the 10:00 P. M. feeding be resumed for a while and then eliminated again. The majority of infants will go on a three-feedings-a-day schedule around seven months of age. This is, of course, variable. There are two signs the baby exhibits that will guide the physician or mother in changing to 3 feedings daily. One is that he will sleep later in the morning, the other is that he will not be hungry for one of the feedings during the day, most likely the 2:00 P. M. feeding. When these signs are present, an infant can and probably should be put on three daily feedings.

We have no objection to the use of the chopped or junior foods; however, it has been our experience that it is an unnecessary change and therefore we begin our children on soft table food fairly early. We find we have less refusal of the solids and feel that since this often allows the baby to become a part of the family at mealtime, he will learn to feed himself earlier, and fewer feeding problems will occur in the second year.

One of the most important aspects in advice given to mothers is the discussion at the end of the first year of life. Time should be taken to explain the growth habits in the child of this age. Infants grow rapidly the first year, with a gain of about 12 to 16 lbs. In the second year, however, growth slows remarkably and the weight gain is only 3 to 5 lbs. Because of this, the child does not need as many calories and consequently is not as hungry. This upsets many parents who, in turn, fight, force and plead with the child during mealtime to try to get him to eat, which only plants and nourishes the seed of a severe feeding problem. The time spent to prevent this is about as valuable as any in the practice of pediatrics.

Table 3 shows a list of the more common feedings difficulties. Because of the limited time and space it is impossible to go into these in any detail. I do not think the first section needs any comment except to note that it is not an uncommon problem. Proper instruction as regards bottles and nipples, burping, and feeding technique at the time of hospital discharge will save the mother many disturbing hours.

"Colic" is a good, descriptive term although it certainly is not an entity. It covers a multitude of difficulties. I like the term and use it frequently, but one must be on the alert to find the cause, if possible. The table lists some of the important causes. Probably the most frequent is anxiety on the part of the person or persons taking care of the infant. The infant can sense the uncertainty or insecurity of the situation and usually reacts accordingly. The problem is handled by explaining the situation to the parents and, occasionally, the judicious use of a mild sedative for a few days. Very occasionally, it might be necessary to separate mother and infant for a couple of days and then begin again

FEEDING DIFFICULTIES

1. Improper Feeding
   a. Bottles
   b. Burping
   c. Improper technique
2. Colic
   a. Due to improper or inadequate Feeding
   b. Over anxiety on part of Mother, Father or Nurse
   c. Disease in Infant
      (1) Congenital Deformities of G. I. Tract
      (2) Intracranial Disease
      (3) Sensitization to Foods
      (4) Hypertonic Infant
3. Vomiting
   a. Same as 1. and 2. above
   b. Rumination
4. Diarrhea
   a. Infection
      (1) Viral
      (2) Parental infection
      (3) Enteral infection
   b. Sensitization to Foods
   c. Celiac Syndrome
      (1) Pancreatic Fibrosis
      92) Abnormality of G. I. Tract
   d. Transitional stools

Table 3

after each has had a chance to rest. This should not be done except in extreme cases; it is better for the mother to settle things herself in order to gain confidence in her ability to take care of her infant.

We must, however, be on the lookout for the many abnormal or disease conditions that can cause similar symptoms. An appropriate examination should be done if deemed necessary. Sensitization to certain foods is not a common cause of colic, but occasionally is seen. The best way to make such a diagnosis is to eliminate the food and if the infant improves, to try it again to see if this is fact or coincidence. Milk sensitization is the most common and may be verified by stool examination for eosinophils. This is laboratory proof of food sensitization. If the infant is considered to have this problem, excellent milk substitutes in the form of soy bean formulas are now available. They are simple to

use and in almost all cases the young infant tolerates them well.

Even though widespread, the practice of changing a formula because it "doesn't agree" usually is not justified. Except in case of allergy, or some of the celiac conditions, change in formula is not indicated. In time, the cause of the difficulty will clear of itself and, meanwhile, if the formula has been changed enough, the last change is given credit for the improvement when, in fact, the cause of the improvement is resolution of the underlying disturbance, of itself. Use of the phrase, "the formula did not agree," is very much like use of the term "teething" to explain almost all of the unknown fevers and upsets that occur in young infants. It covers our ignorance but it is not usually the explanation of the trouble. A little more detailed history-taking and physical examination, and a little less formula changing is the answer to better infant care.

Because of the many disease conditions that manifest themselves as feeding difficulties, it behooves the physician to be on the lookout for them. Many of the diseases are readily diagnosed early if careful examination and pertinent laboratory examinations are performed. The well-being, the length of the disease, and even the life of the infant can be markedly modified by the alert, interested and conscientious physician.

PRINCIPLES OF INFANT FEEDING

1. Well balanced formula with proper protection against contamination and spoiling.
2. All foods are started in small quantities and increased as desired.
   a. Milk
   b. Solid foods
3. Feeding routines vary depending on growth and hunger. There is a marked difference between Average and Normal babies.
4. Change formula only on real indication.
   a. Evidence of sensitization
   b. Intolerance to sugar
   c. Intolerance to fat
5. Infant feeding should be made as simple as possible for the doctor and the mother.

Table 4

Table 4 summarizes the important points I have tried to develop.

The Doctor as a Whole Man

One of the most pleasant prerogatives attached to the Presidency of the American College of Chest Physicians has been the traditional access to the editorial pages of Diseases of the Chest. As physicians, we all have ample opportunity to publish the results of our research on particular medical problems. But one seldom has an opportunity to speak his mind on larger professional concerns. One seldom has an opportunity to talk about medicine in a general way, or about the doctor's relationship to medicine, or about his non-medical responsibilities. Access to the editorial pages of this journal is such an opportunity, and it would have been only fair to warn readers that we proposed to take full advantage of it during the past year.

What we had to say was couched in moderate terms. There was no reason to sound the tocsin; indeed, there is good cause for rejoicing. At no time in history has medical progress been so spectacular as in the first half of the twentieth century. As regards the availability of accurate medical knowledge, this is of course a truism. Not so obvious but perhaps equally significant has been our success in establishing standards of professional competence. The doctorate in medicine implies today a very high degree of knowledge and ability. One has only to thumb through the Flexner Report of a half a century ago to see how much of an achievement this has been.

But progress is not automatic. Our own fortunate situation is in large measure an inheritance; the good things of the present we owe to the foresight and the will of our predecessors. And we are obligated to exercise the same qualities for those who will come after.—Seymour M. Farber, M. D., in Diseases of the Chest.

Stress and Other Factors in the Causation Of Arterial Obstruction*

William Dock, M. D.

One pathologist ascribes arteriosclerosis solely to the local hydraulic "stress" set up in the walls of arteries. He chooses to ignore the fact that most animals and primitive human tribes, under greater stress of this sort than our sedentary victims of arterial disease, show no arteriosclerosis at advanced age. Fifty per cent of young American soldiers dying of wounds in Korea showed atherosclerosis while Japanese, Chinese and Koreans of the same age did not. The vascular effects of hypertension and of flow friction may account for localization but not for causation of atheroma.

When Selye introduced the idea of bodily reaction to stress involving the lymphoid tissue and adrenopituitary system, he was not referring to emotional stress but to infection, trauma, burns, chilling and intoxication. It is established now, however, that intense emotional reaction also can cause activation of this mechanism, and the term "stress" is widely used to mean family worries, business difficulties and social friction.

In any given situation, individuals react in various ways. One person may be easily depressed or angered by some trifling annoyance while another, both inwardly and outwardly, is unmoved by real disaster, meeting, to paraphrase Kipling, with "failure and success and treating those impostors just the same." To some extent this difference is inherited, to some extent, cultural, like the impassivity of some American Indian tribes and the violent rage and grief of some Mediterranean peoples. Many psychiatrists feel that impassive outward response may potentiate the visceral effects of unwelcome situations, and this well may be true of many of our countrymen. On the whole, people who sleep well, forget insults quickly, and evidence philosophical acceptance of the "arrows of outrageous fortune" seem to be less prone to hypertension, coronary disease and duodenal ulcer than those who brood over their troubles in black silence or those who exhibit easy arousal of violent reactions.

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The Author

- **William Dock, M. D., Professor of Medicine, State University of New York College of Medicine at New York City, Brooklyn, New York.**

Activation of Hypothalamic Nuclei

It is now evident that activation of the hypothalamic nuclei by trauma, acute illness, or situations which arouse anger, hostility or frustration can affect the arteries in several ways. One is by raising arterial pressure, and the familial pattern of hypertension in response to emotion has been proved in a number of studies. Another is by raising plasma levels of lipids (triglycerides and cholesterol), thus accelerating atherogenesis and increasing plasma viscosity, also shortening coagulation time and prolonging fibrinolysis.

The lipid response to stress is mediated by lipid-mobilizing hormone from the pituitary, also by increased output of corticosteroid. Similar effects can be elicited by epinephrine injection, also by acute alcoholism. Nicotine, which causes pitressin antidiuresis and which has an epinephrine-like action, also is believed to raise plasma lipid levels. When under chronic emotional pressure, individuals tend to smoke and drink more than they do when life is less aggravating, so that the over-all rise in plasma lipid often is marked. All this was clearly stated, insofar as coronary patients are concerned, by Osler more than a half-century ago: "The majority of my cases are business men, leading lives of high tension, who eat, drink and smoke to excess." The mechanisms by which "high tension" affects the vessels, and the difference in plasma lipids and in coronary disease in men and women leading lives of high tension have been documented in detail in the past five years.[1]

Our Present View

Thus, our present view may be summarized as follows: Persons with habits of work and of eating, like those now prevailing in North America, show a high incidence of vascular disease. The incidence is highest and the disease

occurs earliest in families with high blood lipid levels, and in those individuals who seek vigorously to advance in status. Success seems to reduce the risk of vascular disease, for in studies of employees of the telephone and the insurance companies, the lowest coronary death rate was among the executives, the highest among the clerical force.

Intimal Infiltration vs. Clot Formation

For nearly a century pathologists differed as to whether atherosclerosis was due to intimal infiltration and degeneration or to gradual formation of clots which become plaques in the intimal surface. In experimental studies of atherosclerosis and of the intimal infiltration with cholesterol which is observed in human sucklings and in suckling rabbits, intimal infiltration was proved to be an important factor and most pathologists were led to regard arterial thrombi as secondary to ulceration of advanced lesions, quite unrelated to phlebothrombosis occurring in bed-ridden patients. Beginning with Dedichen's data in Norway and ending with Thomas' comparison of arterial disease and phlebothrombosis in St. Louis and in Central Africa,[2] there has developed overwhelming proof that the tendency for blood to clot in veins is greatest in populations with severe coronary disease, and that diet is so important in causation of both groups of disorders that it outweighs even the effects of stress. Thus, in Norwegians starved and frustrated during German occupation, coronary attacks and postoperative thrombo-embolism declined sharply. Both disorders increased promptly when occupation ended and a high animal fat diet again was provided. In experimental animals, all equally stressed or protected from stress, merely shifting the fat, which provided 40 per cent of the calories, from butter to corn oil lowered myocardial infarction from 60 per cent to almost zero.

Causation a Complex Problem

We must now see causation of vascular obstructive disease as a highly complex problem. Hereditary differences determine how we react to stress, how the body's ability to deal with fat and to prevent thrombosis declines with age, and which blood vessels will be most susceptible to disease. Intercurrent disease may damage vessels or disturb lipid metabolism. An active life lowers lipid levels, develops collateral in the heart and reduces coronary death rate. The American diet, rich in eggs, milk products, and fat from stall-fed cattle and pigs, puts a maximal burden on the metabolic machinery and raises the plasma lipid level of the whole population.

Chronic and intense reaction to social friction still further elevates lipid levels and accelerate clot formation. In studies of our population the psychogenic factor stands out as an important determinant of early and serious vascular disease. In a race like the Japanese, living on a diet low in animal fat, the over-all incidence of vascular occlusion may be low. But in such populations the role of social stress also may prove significant in causing vascular disease in the few who die from it.

Basis of Attack Today

Since heredity and reaction to environment are beyond control (the death rate of coronary disease is just as high among psychoanalysts as among other physicians), the present attack on vascular obstructive disease is based mainly on improving physical fitness by regular exercise and proper diet, by the use of agents like thyroid and nicotinic acid which lower plasma lipids, those like heparin which reduce lipemia and delay coagulation, and other agents, dicoumarol, to mention one, which do not reduce lipemia nor the clotting of shed blood but which have some effect in retarding intravascular clot formation. In animals, drugs like barbiturate and meprobamate retard, while drugs like amphetamine, caffeine, epinephrine and nicotine accelerate experimental atherosclerosis; tranquilizers so far have had little place in our efforts to reduce the death rate of coronary disease.

Everyone talks about stress but, as with the weather, no one has done anything effective to moderate it.

References

1. Friedman, M., St. George, S., Byers, S. O. & Rosenman, R. H.: Excretion of Catecholamines in Men Exhibiting a Particular Behavior Pattern Associated with High Incidence of Coronary Artery Disease, J. Clin. Investigation 39:758, 1960.
2. Thomas, W. A., Davies, J. N. P., O'Neal, R. M. & Dikakulangan, A. A.: Incidence of Myocardial Infarction Correlated with Venous and Pulmonary Thrombosis and Embolism, Am. J. Cardiol. 5:41, 1960.

. . . real generosity toward the future consists in giving all to what is present.

Albert Camus.

Some Neurotic Manifestations of Organic Disease*†

Lawrence A. Kohn, M. D.

Some of the most difficult problems in medical practice are posed by patients who present what we loosely call "neurotic" symptoms. Weakness, fatigue, depression, sleeplessness, irritability and anxiety are their common complaints. While these are at times a part of an obvious physical disorder, there is, in other instances, no apparent justification for them from our examination. The discrepancy between what we hear (from the patient) and what we see presents a recurring problem which is far from solved. These nervous symptoms without concomitant organic findings often are assumed to indicate a psychoneurosis caused by some type of emotional trauma or instability. They are, however, frequent in organic disease as well, and may at times lead us astray as to diagnosis and treatment.

Forty years ago, when I was young in medicine, I was allowed by my teachers to believe that neurotic symptoms could be caused by physical maladjustments. When gross pathology was not demonstrable, one looked for foci of infection and occasionally was rewarded by improvement after some therapeutic measure, often surgical. I still believe that there is illness due to infected teeth and tonsils and, if need be, will engage in argument on the issue, but we all saw the frequent recurrence of symptoms, after a brief remission following tonsillectomy, or prostatic massage, and we know that our problems were not solved. As dynamic psychiatry became better known and psychosomatic medicine offered to account for more and more disease pictures, we began to veer to the other extreme. Nowadays our Rochester students, who may be somewhat overexposed to psychological fallout, can sometimes give me a keen account of a patient's emotional background yet fail to assess properly a change in bowel habit, or a sense of tiredness and warmth in the afternoon. Recently, a woman with a history of an infected wound and of stiffness of the muscles of mastication was thought hysterical, and was sent home from our emergency ward because years previously she had had one frank anxiety attack, and the onset of her present illness fell on the anniversary of a brother's death in the Pacific. Fortunately, a general practitioner, without benefit of dynamics, sized up the problem and sent her back to us with early and remediable tetanus.

The Author

- **Lawrence A. Kohn, M. D., Clinical Professor of Medicine, University of Rochester School of Medicine and Dentistry, Rochester, New York.**

This paper presents some of the neurotic manifestations in three organic diseases; undulant fever, myxedema and carcinoma of the body of the pancreas.

Undulant Fever

Undulant fever, happily, is now becoming a victim of advancing public health, but thirty-five years ago when I came to Rochester, it was a frequent problem. Dr. William S. McCann, then chairman of our department of medicine, made us so conscious of it that we adopted the practice of assuming that patients from several adjacent rural counties had the disease until our assumption was disproved. For a time, a presumptive agglutination test was run on every serum submitted for the Wassermann reaction. In eastern New York, Harris[1] likewise found a high incidence of acute and chronic brucellosis, and rendered a great service by spreading this information down the Hudson and to New York City. Milk and cheese, largely unpasteurized, seemed the carrying agent. This has changed and, with us, undulant fever is now a rarity, seemingly occurring only in doctors of veterinary medicine and in workers in slaughter houses which process western swine. Doctor Harris[2] recently wrote me that he was "concerned about the possibility that acute cases still occur in farmers and users of raw milk but are inadvertently suppressed, or even cured, by the early use of broad spectrum antibiotics before the diagnosis is considered."

In West Virginia, the disease apparently is coming under control. Dr. L. A. Dickerson,[3] of

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your State Department of Health, has furnished me with these data:

Undulant Fever in West Virginia: Cases reported in five-year periods.

1935-1939	27
1940-1944	24
1945-1949	50
1950-1954	39
1955-1959	14

No cases were recorded in 1958 or 1959. It is plausible that the rise in the 1940's represented better diagnosis and that the fall in recent years represents increasing public health control.

Acute brucellosis was relatively easy to diagnose, especially if there were waves of fever. The victim was sick out of proportion to the temperature, with rapid pulse, enlarged spleen and violent sweats. The white blood count was low or, at least, not elevated and, although a positive blood culture with us was rare, the titer of agglutinins (1:320 or higher) usually established the diagnosis. When, however, the fever was low or the acute period of illness was over, when the spleen was no longer palpable, decision was more difficult. Of simple clinical laboratory data, neutropenia and absence of elevation of the sedimentation rate were helpful. In Rochester, we had great difficulty in cultivating the germ from the blood stream in the chronic cases and, among my own, I had no positives. The agglutination titers rarely were beyond 1:40 or 1:80.

In our experience, the opsonocytophagic index was not truly helpful and the skin test often misleading. It could not, however, be disregarded when highly positive, and a concomitant constitutional reaction also had to be respected. I often was tempted to use the old fashioned provocative tuberculin technique evoking a focal reaction with really big doses of antigen. I never quite dared.

For the symptom picture of the non-acute disease, I quote from Spink's classic, "The Nature of Brucellosis."[4]

"Composite clinical picture of brucellosis due to B. abortus. In approximately one-half of the patients, illness started out as an insidious and ill-defined disease. . . . In the milder forms . . . the symptoms persisted for only a few days and the patients recovered completely. . . . most commonly tagged "influenza" or a "virus infection." Unfortunately, in several persons a progressive and unrecognized illness followed, and frustration and discouragement induced by physical exhaustion and mental depression disturbed the emotional balance of many. . . . Worst of all, a neurosis persisted in some instances long after objective evidence indicated that active disease had subsided. Psychotherapy was often of little avail."

I cite a case: D. K., a housewife aged 36 years, came to Rochester in 1951 with a diagnosis of brucellosis, made by Reznik and confirmed by Spink. She had been ill for eight years and while the blood culture had never been positive, the agglutination titer had been high and she had improved under therapy. In the fall of 1950, weakness, slight fever and marked irritability had recurred. The physical examination was negative, but she had a slightly elevated temperature. The blood counts were normal, the sedimentation rate low, and the agglutinins 1:160 with B. abortus.

Psychologically, she was apprehensive, depressed and somewhat suggestible. On one occasion, we observed an unquestionable attack of hyperventilation. However, I thought, and so did a skilled psychiatrist, that her personality structure was sound, and we decided to treat her with sulfonamide and chloramphenicol. In two weeks she was afebrile and markedly improved in spirit. Moreover, the agglutinins soon disappeared. Six months later, with another bout of low fever and weakness, they were again 1:80. Once more we gave treatment, and once more she improved. Until three years later, when she left this area, she maintained "good health."

In reviewing eighteen suspected cases in my own practice, I found that nine had symptoms at onset which sounded neurotic. Of these, eight had slight fever, and in four of eight, the diagnosis eventually was either firm or probable. In these patients, weakness was the most prominent symptom. Depression and irritability, while common, seemed related to the duration of illness and the lack of relief. Not every patient was depressed, but neither is every patient with spreading cancer.

I concluded that weakness and low fever could never be ignored, regardless of the emotional concomitants. There are, however, many psychoneurotic individuals who will steam up a slight afternoon temperature, though it often disappears when they are asked to keep daily record. There also are patients with brucellae well entrenched in the body who have no fever and, because of weakness, anxiety and depression, are erroneously thought neurotic.

If we are too free with diagnosis and too ready with treatment, we may cater to the unconscious desire of some individuals to be ill. If we fail to diagnose and treat the second group, we may be prolonging or perpetuating illness where

psychological difficulties, at least in part, are the reflection of physical "dis-ease." The problem is far from simple, as Harris and Kemple[5] have pointed out.

Myxedema

Brucellosis may be a thing of the past, but hypothyroidism seems, if anything, to be increasing, and almost all thyroid-deficient states are conducive to nervousness. Full-blown myxedema is obvious at first glance, but thyroid failure usually has an insidious onset and, in its early stage or if slight in degree, may escape detection for months. Fatigue, weakness, loss of appetite or loss of interest may be unaccompanied by changes in skin and hair or by marked alteration in reaction to environmental temperature. As Werner[6] puts it: "The mental symptoms of incipient myxedema are nonspecific and are frequently seen as manifestations of depressive reactions or of various psychoneurotic states." A frequent complaint is irritability, which may be due to the patient's constant struggle to lift the fog which has descended on him. The disease, if mild, may fluctuate in severity, and improvement in nervous symptoms may be attributed to personal or environmental factors which actually are fortuitous.

While it is tempting to explain these symptoms on cerebral oxygen lack, full proof of this has not been offered. Their dramatic reversal under adequate treatment is accompanied by improvement in a number of physiological functions. In any case, recognition of mild hypothyroidism grants us one of the rare gratifying interludes in the frustrations of medical practice.

Carcinoma of the Pancreas

Carcinoma of the body or tail of the pancreas is notoriously difficult to diagnose. While indigestion may be an early symptom, it is unaccompanied by physical, chemical or roentgenographic signs until late in the disease. The character of the pain is inconstant from patient to patient, and may vary in the same patient. It is the rule rather than the exception for the physician to miss the truth, and he often will consider that he is dealing with a neurosis until metastases appear. Happily for our peace of mind, there is, as yet, no known therapy. Thus, for the moment, we have the faint comfort of knowing that we have not lost a patient's life by delay in diagnosis.

Yaskin,[7] in 1931, pointed out that marked emotional disturbance may accompany carcinoma of the pancreas. In 1950, I missed the diagnosis in such a case:

The patient, a 61-year-old man, had had epigastric distress of an irregular pattern for several years. He had been carefully studied before I saw him, and had had roentgen examination of the entire intestinal tract.

In the hospital, there was no evidence of weight loss nor was any physical abnormality found, but the patient was preoccupied with his indigestion and was extremely depressed. In a repeat gastric x-ray, it was noted that there was a suggestion of anterior displacement of the pylorus. The patient talked with me at length about some personal problems, and after a number of interviews he improved and left the hospital almost symptom-free. The significance of the roentgen findings was neglected. A few weeks later the epigastric pain returned and, on exploration, cancer of the body of the pancreas was found.

After this blow, I studied the records of 27 cases of the disease from our hospital files, all verified at operation or death. In approximately one-third of these, the patient had exhibited nervous symptoms in the course of the illness, many to the extent that psychiatric opinion and psychotherapy were thought necessary. While these cases did not differ from the rest in the severity or duration of pain, the patient, in so far as could be established retrospectively, more often had a background of emotional instability. At the outset of the study, I had thought that a uniform behavior pattern might emerge, though I was not so naive as to anticipate a specific personality type. While the concept of specificity in psychosomatic medicine is to some extent being abandoned, many experienced investigators are holding the line. We may say that while certain personality types are susceptible to certain diseases, it is only one item in a multifactorial etiology.

The classical psychosomatic candidate for duodenal ulcer, i.e., an unloved younger child who yearns to be dependent and overcompensates in a drive for success which he equates with independence, turns up frequently but there are other mechanisms (steroids for one) which produce ulcer and even Sippy's rule, no acid, no ulcer, does not universally hold true. In any case, the disturbed patients in my series were depressed, or were hypochondriacal, or anxious, or angry. In some instances, it appeared that the attending physician had contributed to the nervousness by assuming, in the absence of objective evidence, that the illness was neurotic, and failing to give support.

I concluded that when patients with unexplained abdominal pain show marked behavior disturbance, the possibility of a pancreatic tumor must be kept in mind.

Discussion

Many neurotic symptoms do not depend on demonstrable physical derangement. In the course of an investigation as to the accuracy of medical diagnosis in the office and in the hospital, I have reviewed the courses of 50 hospitalized patients in whose cases, after a careful study which included 26 psychiatric consultations, the discharge diagnosis was neurosis. The minimal period of follow-up was three years and, in 47 of the 50 cases, there is likelihood that the present status of the patient is known.

Still neurotic	18
Neurotic but improved	5
Status questionable	5
Psychotic	2
Psychotic but improved	2
Organic disease	3*
Well	12
	47

*1 instance each of carcinoma of pancreas, regional ileitis, paralysis agitans.

The "well" group helps remind us that there are many unknown factors in illness. As Lidz[9] remarks: ". . . the problems of the neurotic patient (are) but exaggerations and distortions of normal behavior." We may be (and probably are) healthy carriers of neurotic mechanisms. Our standard human equipment includes vulnerable areas, chemical or anatomical or psychological. That an important emotional experience can be uncovered does not prove than an illness is due to that particular stress any more than a positive tuberculin test establishes active disease or warrants treatment. This fact needs emphasis in view of the rapid increase in the number of drugs available for psychotherapy, so easy to dispense, so deceptive if they afford only symptomatic relief. In their use, there is an analogy to the promiscuous administration of antibiotics in unexplained fever which, as Harris noted, may hide a diagnosis of brucellosis, or even to the false improvement under psychotherapy, shown by some patients with carcinoma of the pancreas.

Conclusions

Unexplained nervous symptoms are seen in many organic diseases. Whether we interpret them as toxemic, or as due to faulty cerebral blood flow or to inadequate physician support, or whether we attempt no explanation, they should call our attention to an altered state of health, to "dis-ease," possibly organic as well as emotional. We must remain aware of their challenge and avoid mistaking one shiny facet of an apparent neurosis for the total shape of an illness.

References

1. Harris, H. J.: Brucellosis (Undulant Fever), Clinical and Subclinical, New York, Paul B. Hoeber, Inc., 1950.
2. Ibid.: Personal Communication to the writer. May, 1960.
3. Dickerson, L. A.: Personal Communication to the writer. April, 1960.
4. Spink, W. W.: The Nature of Brucellosis, Minneapolis, Minn., Univ. Minnesota Press, 1950.
5. Harris, H. J. & Kemple, C.: Chronic Brucellosis and Psychoneurosis, Psychosomat. Med. 16:414-425 (Sept.-Oct.) 1954.
6. Werner, S. C.: The Thyroid, New York, Hoeber-Harper, 1955, pp. 704.
7. Yaskin, J. C.: Nervous Symptoms as Earliest Manifestations of Carcinoma of the Pancreas, J. A. M. A. 96:1664-1668, 1931.
8. Kohn, L. A.: The Behavior of Patients with Cancer of the Pancreas, Cancer 5:328-330 (March) 1952.
9. Lidz, T.: General Concepts of Psychosomatic Medicine, American Handbook of Psychiatry, New York, Basic Books, Inc., 1959, Vol. I, pp. 648.

Changes in IQ in Children

Scientists at the Fels Research Institute have studied IQ changes in 140 children who were tested regularly from infancy to age 10. They found that IQ's do change, that these changes are related to certain personality variables, and that the direction of change can be predicted from observation of particular personality characteristics.

By and large, children who are concerned with achievement, who are aggressive and competitive, and who are curious about the world around them, tend also to show increases in IQ. Children who are passive and usually conforming tend to show decreases in IQ. The closer the genetic relationship of the children, the more similar the pattern of IQ changes will be, so that these personality differences may be nonverbal ways in which intelligence manifests itself. The authors could find no relationship between rates of physical growth and mental growth during the first ten years of life.

The indication that personality characteristics may affect intellectual development has significance for our understanding of child-rearing techniques, school programs, and the prediction of adult intelligence.—Robert H. Felix, M. D., in Rhode Island Medical Journal.

Special Article

Our Responsibilities to Our Senior Citizens*

Cecil H. Underwood
Governor of West Virginia

THREE years ago, I appointed the first West Virginia Commission on the Problems of the Aging. This Commission submitted a detailed report to me in December of the same year.

When Congress authorized the White House Conference on Aging, the life of our State Commission was extended through 1960, and its powers were broadened. The Commission has been fortunate to have the guidance of Mr. H. B. Aycock of the Department of Health, Education and Welfare the past year. We are honored to have him as a guest today. Mr. Aycock participated in our first State Conference in September of 1959.

As you know, the purpose of that Conference was to arouse state-wide interest in the problems shared by an increasing number of our older citizens, and to make plans for developing facts and recommendations for the White House Conference to be held next January.

Ultimate Objectives

Last September, when I addressed the State Conference here in Charleston, I reminded participants of the ultimate objectives set forth in the act authorizing the White House Conference. Let me repeat briefly, paraphrasing the words of the law:

1. To assure middle aged and older persons equal opportunity with others to engage in work they can do, and to gain for the economy the benefit of their skills, experience and productive capacity;

2. To enable retired persons to enjoy income enough for health and for participation in family and community life.

3. To provide suitable housing at prices older persons can afford to pay;

4. To help middle-aged and older persons to plan and develop new skills and interests, and to find social contacts which will make their added years of life rewarding and satisfactory, and avoid unnecessary social costs of premature deterioration and disability; and

5. To step up research designed to relieve old age of its burden of sickness, mental breakdown and social ostracism.

To gather factual data regarding our older citizens, to ascertain the particular elements of their problems, and to determine resources and means for achieving the goals were the responsibility of your State Commission on the Problems of the Aging.

Just after the Conference last year, Mr. J. Floyd Harrison of Wayne, chairman of the Commission, appointed a steering committee to carry out the plans made at that Conference. Through the efforts of the steering committee, leading citizens were named sub-committee chairmen. They in turn enlisted the cooperation of about 40 other citizens to help conduct the studies. You will see the results of much time and effort, and the product of much knowledge and thought in the reports prepared by the sub-committees. These reports cover different geographic areas and varied subject matter. Labor and industry helped make them possible. Professional men and women, businessmen, educators and social workers contributed their special talents. Religious leaders cooperated. Government workers, lawyers and doctors gave their time, as did representatives of civic organizations, women's clubs and senior citizen groups.

So many individuals and organizations have helped make this Conference possible that I cannot name them individually. But I must acknowledge the outstanding contribution made

The Author

- **Hon. Cecil H. Underwood, Governor of the State of West Virginia, The Capitol, Charleston, W. Va.**

*Presented before the Governor's Conference on Aging held at Morris Harvey College in Charleston, September 1, 1960. Submitted to the Publication Committee, September 8, 1960.

by Morris Harvey College, Dr. Leonard Riggleman, and his staff.

Some of you have been working with the Commission since its creation three years ago. Others are newcomers. But all of you are here because of your concern for the welfare of fellow human beings. On behalf of the State and its citizens, I thank you. As volunteers, you will receive no remuneration except the knowledge that you are doing something very important for others.

There are more than 49½-million persons 45 and over in the United States. Sixteen million of these are 65 or over. By 1970, this group will probably reach 23-million citizens.

Complex Problems of the Aging

In West Virginia, persons 45 and over constitute almost 28 per cent of the population. Over 138-thousand of our citizens were 65 or older in 1956. Because of their age, most of these citizens have problems—economic, physical or psychological. Your Commission has analyzed and categorized these problems for study. It has gathered factual data on income, physical and mental health, employment and vocational rehabilitation. It has surveyed education, recreation, housing and social services. The Commission has recorded information about religious organizations in the life of the aging. The Commission has considered the means by which these problems can be studied and solved through civic organization and the development of leadership. Each of these phases of the program will be discussed at this Conference. You will contribute your own knowledge and suggestions. Your decisions will be passed on to the White House Conference on Aging.

As Mr. Harrison has said, you will use the consolidated reports of the sub-committees only as a guide in your deliberations. This is your conference, a citizens' forum. I urge you to consider well the reasons we need this study, and the effect which your decisions may have upon thousands of your fellow citizens.

In early times, primitive tribes sent their old people out to perish of cold and hunger when they had outlived their usefulness. We are shocked at the very thought of such brutality. Yet, we must not be complacent about our high position on the ladder of civilization. We must guard against inflicting a modern version of brutality on our old people. If we consider them only as statistics, as burdens on the state, as cases instead of individuals, we are moving in the wrong direction. The common welfare means more than the good of society as a whole. Justice demands that the good of each member of society be considered.

Basic Needs of the Older Citizen

The older man or woman is a human being, with a human nature. He has physical, mental, social and spiritual needs, as we all do. When you meet in your several groups, I urge you to consider all four basic needs in relation to the topic under discussion.

For example, in studying income maintenance as a problem of the aged, we may be tempted to relate it solely to physical needs. Supply the housing and the food, we may think, and no problem will exist. But human beings need dignity, self-respect and a sense of usefulness. They need recreation, social contacts and mental stimulation. For spiritual guidance and comfort, they need the church. Bread and a roof are basic requirements, of course, but they cannot satisfy the whole person.

We cannot consider one problem of the aging to the exclusion of other problems. Man is complex, and his problems are interrelated. Furthermore, each man is an individual, with individual characteristics, background and temperament. It is for this reason that the first study of the problems of the aging must be made at the local level. The final adjustment of most of those problems should also be made at the local level. The community—and this means persons in the community, not a vague abstraction—must recognize the potentials of older citizens and their needs. The community must try to provide an environment—economic and social—in which the older citizen can live the kind of life suited to his own needs and capacities.

Government and private organizations can solve some problems more directly—such problems as health, housing and retirement aid.

Both labor and industry must realize that they have responsibilities to help solve the problems of senior citizens.

The Citizen's Responsibility

Every person or organization close to the older citizen must accept appropriate responsibility. Otherwise, government at some level will be forced to do the entire job. Where government can best solve a problem, the level of government best equipped to do the job should be carefully chosen—federal, state or local.

Now, you come not to the end, but the beginning of your interest in the problems of the aging. I hope that your preparation here for the White House Conference in January will give each of you the knowledge and the inspiration you need

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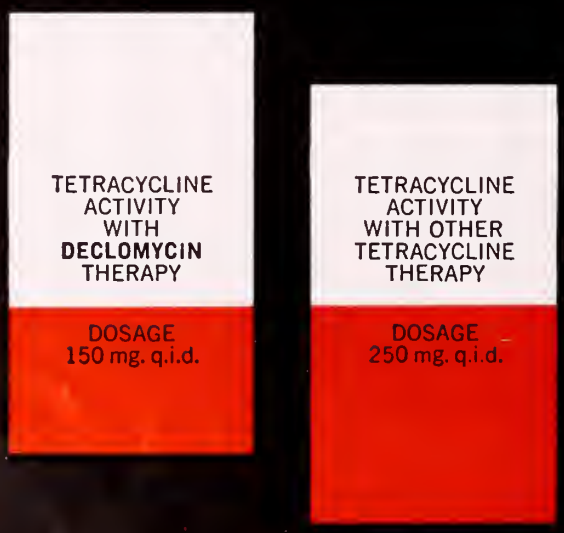
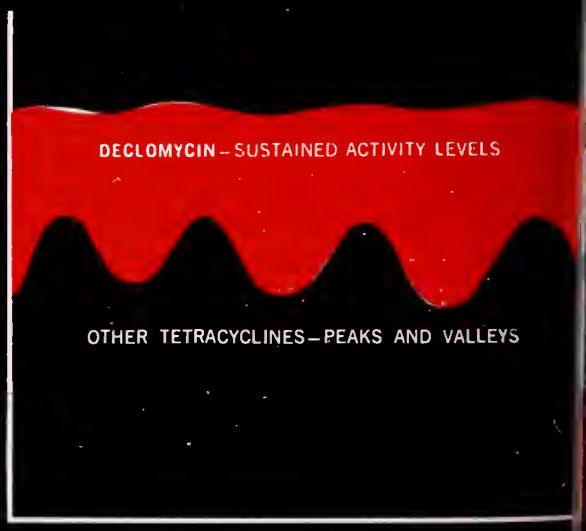


POSITIVE ANTIBACTERIAL ACTION



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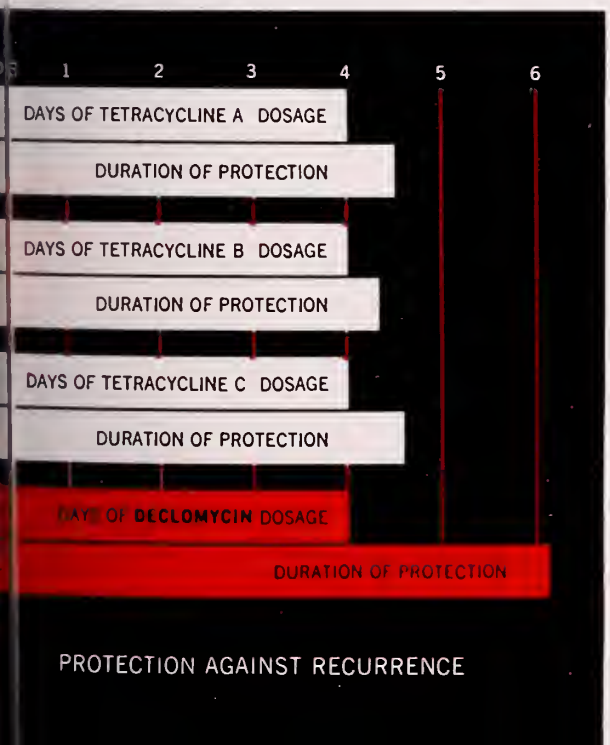

CAPSULES, 150 mg., bottles of 16 and 100. **Dosage:** Average infections—1 capsule four times daily. Severe infections—Initial dose of 2 capsules, then 1 capsule every six hours.

PEDIATRIC DROPS, 60 mg./cc. in 10 cc. bottle with calibrated, plastic dropper. **Dosage:** 1 to 2 drops (3 to 6 mg.) per pound body weight per day—divided into 4 doses.

SYRUP, 75 mg./5 cc. teaspoonful (cherry-flavored), bottles of 2 and 16 fl. oz. **Dosage:** 3 to 6 mg. per pound body weight per day—divided into 4 doses.

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to be active on behalf of the older citizens in your own community.

So far in the 20th century, our imaginations seem to have been captured by new developments in the physical sciences and in increased industrial efficiency. We have displayed immense energy, and we have developed amazing practical techniques for solving physical problems. Now we are on the threshold of an era when solving human problems will present as great and attractive a challenge. Our efficiency and resources will help us establish a social order in which we will see our older citizens as healthy, productive, happy fellow-citizens, not as problems.

Today and tomorrow you will make the decisions which will result in recommendations to be submitted to the White House Conference next January. I am grateful to you for your attendance here, and I wish you every success. You perform a great service to West Virginia.

Administrators of the Unforeseen

EVERYONE old enough to remember World War I has an anecdote to tell about the terrible influenza pandemic of 1918, known generally as the "Spanish flu." When the final toll of this disease had been counted, its victims—some 20,000,000 around the world, perhaps 850,000 of them in the United States—far outnumbered those killed on the battlefields. Mankind had not suffered such an onslaught since the black plagues of the Middle Ages. The United States has never experienced its equal, before or since.

Now let us roll the calendar forward to a similar event within the memory of everyone here—the Asian influenza epidemic of 1957. This pandemic was unforeseen and unforeseeable, in terms of its date, point of origin and precise nature, just as its predecessor had been.

Nevertheless, machinery which had been set up in the interim swung rapidly into action. Within a month after the disease broke out in Red China and then in Hong Kong, the virus strain was isolated by personnel of a U. S. Army Field Hospital in Japan and identified by the Walter Reed Army Institute of Research in Washington as a new strain, against which the general population had virtually no immunity. By the end of this same month of May, drug manufacturers had begun developing a vaccine, and vaccine was available before the first case occurred in our country.

The Asian influenza epidemic struck the United States in full force in September. At its peak, Americans were confined to bed during a single week in late October. Viewing the epidemic in retrospect, however, there is little doubt that the massive preparations prevented a far more serious result. Sixty million doses of vaccine had been produced in six months—a remarkable achievement—and those persons who received the vaccine soon enough obviously received a large measure of protection.

I have told this story in detail, not for purposes of self congratulation to the health professions, but rather to illustrate a process—the process of drawing on the known and the predictable to deal effectively with the unknown and the unpredictable.—Leroy E. Burney, M. D., in Journal, Florida Medical Association.

Special Article

New Horizons for the Aging*

Theodore G. Klumpp, M. D.

The process of aging begins at conception. It continues from beginning to end. For most of its span, it is not in itself a cause for concern. But eventually there comes a time to all survivors when mental and physical functions have declined to the point where we are no longer able to carry out the purposeful activities expected of us, or to care for ourselves according to the standards dictated by the social environment in which we happen to be nested.

For the opera singer, it is the day he can no longer reach the high notes with the apparently effortless clarity he once achieved, although for years it had become progressively more of a strain. For the concert violinist it comes when his fingers first fail to trip off the difficult cadenza that is the show piece of the virtuoso. For the brick layer, it is that final day when he quits before he has laid his 300 bricks, always due to a backache or some other once inconsequential but now convenient disability. For primitive man, it comes during a bad season when he fails to bring in his share of the food to sustain his dependents. This is old age. Some tell-tale event sadly tells us the time has come but we won't admit it, even to ourselves, until much later.

Through the space of recorded history, different civilizations and different cultures have dealt differently with their aged and infirm. In ancient times, there was no such thing as old age or senility. Death came when the person was no longer self-sustaining or of any use to his social group. Primitive tribes ordinarily eliminated the old and some resorted to cannibalism. The ancient Greeks and Romans regarded advancing age as a cumulative evil. Socrates calmly drank hemlock at 70 but the Romans deferred to the wisdom of their Senators. The Chinese and Japanese revere, respect and serve their elders. The Esquimaus used to turn them out to die. Others just let them wither away in a rocking chair.

*Presented before the Governor's Conference on Aging held at Morris Harvey College in Charleston, September 1, 1960. Submitted to the Publication Committee, September 1, 1960.

The Author

- **Theodore G. Klumpp, M. D., President, Winthrop Laboratories, 1450 Broadway, New York 18, N. Y.**

Transition in Attitude Toward Aging

In our urban industrial civilization, we have been passing through an interesting transition in our attitude toward the aging. In the 19th century and before, employers simply discharged their older workers when they could no longer keep pace, or during slack periods. Once out, it was extremely difficult for them to find other jobs. They were supported by their children and relatives or they went to the "Poor House." The name was later changed to something more euphonious like "Home for the Aged." Most of these were supported by churches or fraternal organizations. Tax supported institutions were few and it was not until the present century that they became numerous.

But our social consciousness began to stir in the early twentieth century and our forebears began to realize that it was wrong to turn out older workers without some means of support. Children and relatives were often unable or unwilling to take care of their jobless kin. Our institutional homes for the aged were on the whole only a cut better than our jails. They were miserable refuges for the declining years of those, most of whom had given everything that society had asked of them during their better days.

To meet this problem, pension plans were instituted by our large and supposedly wicked corporations. To say that the companies merely transferred part of the employee's wages into a kind of deferred compensation is not entirely true because as a general thing these companies paid the same wages as the others, but in addition they made a contribution toward retirement. The plans spread, not like wild fire, but progressively throughout industry, large and small. However, for actuarial and other reasons, compulsory retire-

ment at a fixed calendar age was brought into being. All of this must be viewed historically as a great social advance. At the same time, let it be recorded that though the workers achieved a great gain, the corporations didn't lose.

Twenty-five years ago, social security came into being principally to cover those whose companies had no pension plan or where they were inadequate. In recent years the unions, through the pressure of bargaining, have added further impetus to the adoption and improvement of pension plans and the corporations still don't appear to have suffered.

Compulsory Retirement

Why do I review these historical developments which are as familiar to you as they are to me? Merely to illustrate that time marches on and ideas change. Pensions and compulsory retirement were great steps forward in their day. But we have come to the point where we are no longer sure that compulsory retirement is a good idea and a necesary part of the pension system. Today we appear to be on the threshold of what may be another great advance. We think it possible to work out a retirement plan based on fitness and ability to do the job, without disturbing the actuarial soundness of our pension plans, and without repressing the employment and advancement of younger workers. We have talked a great deal about the elimination of retirement by the calendar and the idea seems to be making some headway. For example, a survey by the Bankers Trust Company showed that in the 1953-1955 period 6 per cent of firms had no fixed compulsory retirement age for salaried employees whereas in the 1956-1959 span, the proportion had risen to 17 per cent. But despite these small gains, I warn you not to underestimate the resistance of corporations, generally, against changing the present status of compulsory retirement on a calendar basis.

On all sides the heads of companies see older employees, and particularly fellow executives who have lost their effectiveness, or previously undiscovered, never had it. They have been with the company too long to be thrown out, and may I note parenthetically that this is in itself a great advance in man's compassion for his fellow men. But company managers count the months or years when they can get rid of the dead wood gracefully and humanely by compulsory retirement. To them any change in the present system means that they will be deprived of the one firm fixed and certain method they now have of revitalizing and rejuvenating their organizations. And while they don't particularly like it, they don't mind losing a certain number of valuable employees and executives in the process. When balanced out, they are convinced that the price is not too great to pay. This argument is not easy to refute.

The answer, as I see it, is something like this. Those who seek to change the system of compulsory retirement on a calendar basis are not advocating a program which will provide an indefinite refuge for the unfit. They merely believe that whenever society adopts a rule that eliminates the fit with the unfit, destroys the good with the bad, or punishes the innocent with the wicked, it is not a good rule. Civilization progresses by changing rules of this kind. In an imperfect society, human beings are pushed around as a faceless mob. But social progress may be measured in the last analysis by the degree of skill and discrimination with which society solves the individual problems of its members.

Selective Retirement

This philosophy they would like to apply to the process of retirement as it is now followed in the selection of employees. "But can it be done without charges of discrimination, favoritism and injury to company morale particularly when applied to top management personnel," asks the president. The answer, again as I see it, is that it is being successfully done. Our military, for example, has practiced selective retirement by means of retirement boards for many decades. The retirement board takes into account the health record of the employee, his performance record on the job, and the needs of the service in terms of manpower tables for the various positions and functions. With these factors in mind, it recommends impartially whether or not the employee should be retired. What we need now, more than anything else, is a number of well publicized demonstrations on the part of respected industrial concerns that what the military does so successfully can also be done by business. It is being done, but business executives generally have not had these successful experiences drawn to their attention. At the same time, our governmental establishments, both Federal and State, should provide the same good examples of what can be done. Despite the progress that has been made, the problem of compulsory retirement remains as one of the great challenges of the second half of the twentieth century. Bernard Baruch put the challenge in words that we should never forget, "We must get away from employment policies based on cold arithmetical averages and take advantage of the skills and judgment of older people. How hideous a mockery it would be if, as a result of advances in medicine, surgery, hygiene, and

higher living standards, older people were left willing and able to work—but society deprived them of something useful to do."

In the time available, I can give but passing mention to the ancillary aspects of the retirement problem such as preparation for retirement, tapering off, longer vacations and the various schemes that have been suggested for gradually reducing the work load in the later years. These will be amply considered no doubt in the various sections of the White House Conference.

Making Retirement Attractive

However, it cannot be emphasized too strongly that the other side of the coin is important too. With further gains in the population of older persons, it will become increasingly desirable, and indeed necessary to see to it that voluntary retirement is made more attractive so that a larger proportion of older workers will elect to retire at earlier ages.

There is hardly a chance that future industrial expansion and the development of new industries can keep pace with the projected growth of the population, and our ever more fantastic genius for mechanization and the development of labor saving devices. We face the future, I'm afraid, with the prospect of more workers than there will be jobs. I haven't the slightest fear that this will lead to calamity because I think our American civilization is mature and wise enough to make whatever adjustments are necessary. "Operation Voluntary Retirement" is one of them and we should begin now to avoid the lag that so often characterizes the functioning of a democracy. First of all, retirement must be made economically, if not attractive, at least acceptable. We have made progress toward this in the improvement of pensions, the increase in savings and the expansion of insurance coverage in all categories, both public and private. I doubt that we have attained the millennium. The present limit of $1,200 that oldsters may earn without forfeiting social security pensions is a serious obstacle that defeats its own purposes. The currently proposed advance to $1,800 is still not enough.

But man lives not by bread alone. For retirement to be attractive he must be encouraged to develop interests other than his work. The term "hobby" has acquired an unfortunate connotation, suggesting something done with a half hearted interest to kill time. Its symbol is basket weaving. Perhaps what we really mean is a secondary work interest. But most important of all for his physical well-being, he must learn to find an interest in some form of enjoyable regular physical exercise. This he will need before retirement to compensate for the labor saving devices that deprive him of this vital necessary use of all of his functional capacities.

Your presence at this meeting is ample testimony of your interest in the problems of aging. But it signifies something more profound than that. This conference and similar ones in every state of the Union are evidence of a great ground swell of interest in the subject that might well turn out to be one of the great sociological movements of the century. Let us keep in mind that it did not happen suddenly, explosively. Concern for the problems of the aging has been fermenting in this country for more than two decades, and indeed there was a previous White House Conference on the subject in 1950.

Increasing Population of Older Persons

What has been responsible for this tremendous surge of interest in this great human aspiration? I happen to think that several circumstances combined to bring it about. First and foremost, the advances in medicine, surgery, public health and sanitation have given us the blessing of longer life and, as you all know so well, a greatly increased population of older persons.

While any problem may be aggravated by the pressure of numbers, I think I am fair in saying that our concern for the problems of the aging began voluntarily as a matter of foresight. We were not pushed into it by the old folks.

At the same time, we have passed through almost three decades of national prosperity—a period unprecedented in our history. For the first time in the history of civilization, no one is hungry in a nation of over 170 million persons. The significance of this must not be overlooked—our national prosperity provided the opportunity to devote ourselves on a national basis to the social and economic well-being of all segments of our population. Coupled with this, over a span of 15 years, our national energy and interest has not been distracted and absorbed by major wars, catastrophies or disease.

But at the bottom of it all, I am convinced that we are becoming better human beings, kinder, more considerate and more concerned for the welfare of our fellow men. In this connection perhaps Sir Winston Churchill was right when he said, "You can measure the civilization of a people by the way they treat their older folks."

Since the beginning of time, man's unending struggle has been to protect himself and his loved ones from famine, pestilence, earthly catastrophies and his living enemies. History records the fabulous gains that have been made in overcoming these threats to his existence and well-being. The struggle will never end but we have

come far enough, so that we have been able to give our attention to other things we cherish.

We are now interested in something more than mere existence. We look for a higher standard of living, education, adequate medical care at all ages, adequate housing, enough food and protection against want and deprivation in our old age. In some measure we have all of these. Not so long ago, these human aspirations were satisfied to the extent that one could afford to purchase them. Today, they are regarded not as privileges but as rights to which everyone is entitled regardless of ability to pay. The general acceptance of this proposition marks another step forward in man's yearning for a better life.

Medical Care of the Aged

Within the last year, there has come general agreement that further steps should be taken to provide more adequately for the medical care of the aged. In recent weeks, the legislative debate was principally concerned with the method by which this is to be financed. Within the last few days, both houses of the Congress have passed compromise measures which will no doubt be reconciled in conference and the resulting bill signed by the President. While it may not satisfy everyone, let us not lose sight of the fact that it represents our nation's formal acknowledgment of a need and action to meet it. The date of its enactment into law will be another historically important date on the calendar of progress for the aged.

There will no doubt come before the White House Conference and its preliminary meetings many propositions to add to the benefits for the aging. If they are all meritorious as I am sure they will prove to be, why should they not all be adopted and placed into effect? There is only one reason why they cannot and this was expressed by a man of 90, Bernard Baruch, who said in this very connection, "We dare not undertake more than our economy can stand or we will defeat our own purpose." In other words, much as I dislike saying it, we must view such proposals from the standpoint of our ability, as a nation, to afford them and still retain our American way of life.

By every sign that I know, we are rapidly moving toward the status of a welfare state. This comes at a time when we must maintain our defense armaments at a staggering expensive level, engage in a fantastically costly scientific, economic and technological race with Russia and, at the same time, sustain the economic, defense and development programs of the entire free world.

We are trying to do all this in the face of a national debt of nearly $750 billion according to Maurice Stans, director of the Bureau of the Budget. We must not repudiate this debt by confiscating part of your savings, insurance and investments through future inflation. Bad as this would be, it would be even worse in our cold war with Russia because the faith and hope of the free world rests as much on the stability of the American dollar as it does on missiles and bombs. If this is true, then we must defer some of the good and worthy things we want to do so as not to add to the national debt. Indeed it is vitally necessary for our own sakes and for the sake of our children and children's children that we reduce it.

Taxation and Freedom

We can progressively increase taxes to pay for the added things we'd like to have and at the same time strengthen the faith and credit of the United States by reducing its debt. But there is a limit to this too. Do you realize clearly that, as we increase taxes, we are taking away from our freedom? We are giving up the right to spend our earned money as each of us see fit and telling someone in government to spend it as he thinks is best for us. It was the great liberal, Justice Brandeis, who said, "Experience teaches us to be most on our guard to protect liberty when the governments purposes are beneficient." At the same time, excessively high taxes have a seriously repressing effect on individual and corporate enterprise and initiative. Prudent people don't take great and costly risks when the reward of success after taxes is inadequate.

As idealists devoted to the welfare of the aged, we are eager to do everything we can to improve their lot. There is every reason to anticipate that the continued economic growth of the United States will support expanded welfare programs for the aged but we must pace them according to our ability to pay for them. Perhaps too the day will come when we will be able to reduce our huge expenditures for defense and devote some of those funds to nobler purposes.

The Proper Approach

I have attended many meetings concerned with the aging. It has seemed to me that we have been preoccupied with the social and economic problems of the aging. Important and timely as these aspects of the problem are, I would like to invite your attention to other equally important considerations.

Old age wouldn't be so bad if we could approach this stage of our existence in reasonably good health and sound in body and mind. Surveys bear out the impression that an appallingly

high percentage of those who survive to the sixth decade enter that period with bodies so badly damaged by disease that they function only to a limited extent. This is so widespread that questions have been asked as to what is normal for old age. Is all this damage merely the normal wearing out of the body, the same as an old worn out car? And, is a stiff and at the same time flabby, cracking, groaning, knocking, weak, tired, breathless body normal for age 60? Some people have an idea that over a span of 50 or 60 years the human machine is bound to wear out or suffer damage along the way. The same people perhaps used to think that whooping cough, measles, mumps and many other infections were the invariable counterpart of childhood. We know now that this is not true. There is no reason why the disabilities of old age cannot also be eliminated one by one.

The mechanistic analogy of comparing a living body with a machine is basically incorrect. Machines do wear out, principally because of friction, corrosion and oxidation. But the cells of the living organism renew themselves indefinitely. It has been said, with some poetic license perhaps, that we have a new body every 17 years. Living things age but they do not wear out in the conventional sense and the healing and restorative capacities of living things are amazing and wondrous almost beyond human understanding. Nor is there any correlation between the rate at which we live and life expectancy. Indeed the opposite seems to be true. Aside from accidents and cancer, vigorous living mentally, emotionally and physically appears to be conducive to longevity.

Fundamental Biologic Principles

Two important fundamental biological principles appear to have application to what we are talking about. The first is this: Tissues and functions that are not used, atrophy. There is no argument about the application of this principle to muscle tissue. We must not forget that the functional capacity of the heart and blood vessels is derived from their muscular structure and the manifestations of atrophy in these organs are clearly evident at all ages in the shortness of breath and reduction in work capacity that results from disuse.

To me one of the most striking demonstrations of this is the astonishing rapidity and extent of the physical and circulatory deterioration that takes place as the result of a short period of immobilization in bed. In addition to the manifest effects in terms of circulation and muscles, we know that the bones lose their calcium, joints stiffen, clots form in the blood vessels, digestion is impaired, and the bowels and organs of excretion lose their functional efficiency.

I have no doubt that the endocrines, in their delicately balanced interrelationship, suffer also. This immobilization in bed, and its effects, differ only in degree from the immobilization resulting from our so-called labor saving devices and present day attitudes toward physical activity.

Based on loss of motivation and interest and to a large extent because of the fear psychosis against exercise and exertion, our middle aged and older people reduce their physical activities still further, to the same effect and with what I believe is especially damaging, if not disastrous results.

Stress

In addition to the consequences previously noted, atrophy of disuse accentuates the lessened capacity of older persons to react to stress. I have no doubt that such avoidable atrophy is a contributing factor in the death of older persons subjected to accidents, shock, operations, deprivation, stress and prolonged illnesses.

So much has been said and written about the harmful effects of stress that I'm afraid we have been left with an entirely lopsided view of its biological role. It has not been made entirely clear that *extremes* of stress, from the standpoint of intensity or duration, are harmful. In this connection, from a biological viewpoint, it is safe to assume that extremes of any kind are harmful. Like potent medicines, the proper dosage is beneficial and even life saving; too much is poison.

In a similar way I look upon moderate or graded stress as necessary to the maintenance of good health, vitality and an adequate reserve against the extremes of stress that in one way or another befall all of us.

From a biological standpoint, functional capacities of all systems of the body can only be augmented through moderate stress. This I have no doubt applies to the mind and emotions as well as the rest of the body. This principle has, I believe, particular application to the aging process. After the prime of life, the peak of which comes at different times for the various functions of the body, a decline occurs. In my opinion this decline will proceed more slowly if the bodily functions are fully employed and through moderate and unfortunately descending stress, they are held to their maximum capacities.

What I consider one of the most important biological principles has a bearing on this subject and it is this, "Nature tends to eliminate those who have relinquished their functional usefulness."

Unfortunately nature does not appear to favor mind over matter, and the full utilization of only our mental capacities does not appear to be enough. I believe that we must do everything we can, as we grow older, to resist the inclination to slow down the tempo of our living. I am convinced that if you will just sit and wait for death to come along, you will not have to wait so long.

Role of Medical Research

It is arthritis, arteriosclerosis, cancer, deafness and a host of other diseases and neurological disorders that determine what kind of an old age, if any, you and I are going to have. Everything else fades into insignificance in the face of disease and disability. It matters little whether the disturbance begins early or late in life. If the individual survives, the heritage of old age is disease. If this is true, above all else our first and most important task is to see to it that everything is done to prevent, mitigate and cure the afflictions that rob us of health and vitality in our later years.

In connection with this, it is gratifying to note that the people of this country appear to be awakening to the significance of medical research. Their representatives in the Congress have voted vast increases in research appropriations and there is every reason to expect that more will be forthcoming as our capacity to utilize more funds effectively is demonstrated. (We must recognize that medical research, which is war against disease, is wasteful. But one success is worth a myriad of fruitless efforts).

Fluoridation

It is an accepted fact in Medical and Dental circles that an adequate intake of fluorine is essential, among other things, for proper nutrition and development of the teeth and in the prevention of caries up to about the age of twelve years. Following that age, the effect of fluorine intake is not important from a dentition standpoint.

As a result of this, the fluoridation of water has been prompted by the dental profession and has been endorsed in principle by the American Medical Association's House of Delegates and the Council of the Wayne County Medical Society.

Many communities, notably Jacksonville, Florida, have a sufficient quantity of fluorine in the natural water and to them there is no problem. Many communities, notably Grand Rapids, Michigan, have had a sufficiently long experience to show that fluorides can be added to the public water supply safely and effectively.

There are many opponents to the fluoridation of the entire water supply of a community for the benefit of a relatively small (20 per cent), although highly important segment of society. Much of the opposition is "vitriolic" in nature and numerous reasons are given. Some of it comes from our own profession. Even the public in many places is opposed. According to an article in the Wall Street Journal of November 23, 1960, there were 16 communities voting on the subject in October and November, 1960, and all rejected fluoridation of the public water supply. The largest city to reject was Cincinnati, Ohio. One community, Merin, California, rejected it for the second time.

Perhaps there can be another way out if this opposition is to be surmounted. There is a precedent established in the use of additives in food; for example: irradiated ergosterol or vitamin D in milk, iodine in salt and vitamin B fractions in bread.

Possible substances to which fluoride could be added are soups and broths, bread, table salt, milk, drinking water and pills or drops for daily consumption with the proper amount incorporated.

All of these suggestions require study and consideration. If any were adopted a little effort on the part of the parents would be required. In addition there would be "free choice" as to whether or not a child receives fluoride. Who objects to "free choice"?

Let's be practical. If we can't put one method over, let's find one that is better.—Clarence I. Owen, M. D., in Detroit Medical News.

94TH ANNUAL MEETING

of the

West Virginia State Medical Association

The Greenbrier

AUGUST 24-26, 1961

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The President's Page

Guest Author, Eugene J. Ryan, M. D., Charleston, Chairman, Committee on Medical Emergencies and Civil Defense

Are We Too Complacent?

BEING a guest writer for the President's Page is indeed an honor. My thanks to Dr. John W. Hash for this privilege are most sincere, but are only a token compared to the gratitude of the physicians of our Committee on Medical Emergencies and Civil Defense and that of the thousands of potential disaster victims who will be benefited by the interest which we hope will be developed by state physicians who read this page.

Think for a few moments. Would you know what to do right now, as you read this, if you received a call that your local hospital was swamped with 200 injured persons from a local disaster scene? Would your hospital be prepared to handle such a load? Would you remember your assignment in the hospital's disaster plan? Don't be smug and complacent—would you?

You might think such an occurrence is preposterous or even impossible. Dr. Cecil Clark of Lake Charles, Louisiana, probably thought the same thing on the morning of June 26, 1957, as he left home for his regular house calls, and never saw his family again until three days later when that infamous tidal wave hit the Louisiana coast and forced him to work around the clock treating casualties of that disaster. He did not know for two days the whereabouts of his family, and only then did he learn that three of his children had been killed! We should have him write this page. Possibly he could jolt those of us who still think "it can't happen here."

How do you like the Cuban situation? And Laos? And Africa? And Russia? Have you had time to notice that we will now have a full *fifteen minutes* warning should Khrushchev decide he would like to try out his nuclear weapons on us?

This might appear to be harsh alarmism, but, in fact, it is frank realism. A disaster preparedness void exists in West Virginia. Your President knows it, our Committee knows it, we are worried by it, and we plan to do something about it.

During the coming year your Association's Committee on Medical Emergencies and Civil Defense, working with the State Health Mobilization Office, will activate a number of programs which will require active participation by all members of our profession. Already seven Civil Defense 200-bed emergency hospitals have been pre-positioned in various parts of our State. A training program will be conducted in South Charleston to teach physicians how to set up these hospital units for use. Physicians will be called upon to take the initiative in training nurses, dentists, pharmacists and other paramedical groups for the work they will have to perform in the integrated, coordinated program of caring for casualties when disaster strikes.

We will be in touch with you through *The Journal* and through your local Society. When we do, please respond.

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EDITORIALS

THE DANGERS OF FORANDISM

The Congress will undoubtedly soon be tinkering with Social Security, endeavoring to tack on to it the burden of medical care for that segment of our population over the age of 65. Such an enactment would introduce into the Social Security concept a new element — the service factor. Heretofore, O.A.S.I. has been purely an economic matter; so many dollars and cents in such and such categories. The introduction of the variable factor of service cannot fail to result in a much larger increase in the O.A.S.I. tax as witness what has happened to the Railroad Retirement tax since the health insurance feature was added to that program. More than one-fourth of his earnings are never seen by the run-of-mine railroad worker, more than a quarter being withheld as income and retirement taxes.

Certainly nobody objects to governmental payment for medical care of those over sixty-five who are economically incapable of caring for themselves. It is a community duty. But the Forand concept of including such care in Social Security regardless of need goes far afield. In the first place, many needy are not under Social Security and never will be. Some extra governmental arrangement would have to be made for them—another wheel in the already complex machinery of government.

A large segment of those covered by O.A.S.I. are in no need of such governmental medical largess. For instance, this editorial writer is now an O.A.S.I. recipient and feels that it would be governmental folly to have either his hospital or medical bills paid out of tax funds.

The law enacted by the last Congress has not yet been given sufficient trial to know just what it will accomplish, but it seems to us, as set up in West Virginia, to be rather inadequate. We believe a far better measure would be the adoption of a policy of insurance essentially along the lines of that recently inaugurated for the Federal employees which has some latitude of choice on the part of the individual covered.

We would suggest that an annual income of below $2000 for the individual, or $3000 with spouse, have the entire premium paid out of tax funds, and that all within this category be covered upon application. In the income bracket between $2000 and $3000, or with spouse between $3000 and $4000, that the insured pay twenty-five per cent of the premium. If the income is between $3000 and $4000, or with spouse $4000 to $5000, that the insured pay half of the premium. Above this bracket, the insured should pay the entire premium. Also, all in the last three brackets should be included on their own volition only.

The figures we have listed are only illustrative and tentative and should be subject to careful study, especially actuarial scrutiny, before enactment. Such a plan would take care of all our needy aging persons, and would permit all regardless of economic status to have health insurance protection and would use tax funds only for the indigent and the medically indigent. This idea we present only as our own viewpoint, that of a practicing physician, and not as the objective of organized medicine.

Another danger inherent in Forandism is the compulsory element. America was built on the concept of personal freedom and attained its greatness as an exemplification of individual freedom. The more compulsion introduced into American life, the less freedom of the individual and the greater restriction of the freedom of choice. More and more is the American becoming a stereotype rather than a free-acting individual guided by an idealistic ethos.

One grave danger of making O.A.S.I. too all inclusive is that it tends to destroy initiative on the part of the individual and will rear a generation who will really feel that they should be governmentally supported instead of hustling around and supporting themselves and their dependents. Most historians believe that the downfall of Rome began when the Gracchi began feeding the Romans at the public crib. Well may America ponder Roman history!

Another objection to including medical care for the aging in Social Security is that it will inevitably lead to the inclusion of all medical care in O.A.S.I. At present medicine and medical care in America are the best the world has ever known, all because of the freedom in medicine now prevailing. But with any inclusion of medical care under O.A.S.I., the camel's head will be under the tent and medical care will deteriorate.

Once Germany and Britain boasted of their medical progress, but consider research and medical progress in those countries today. The doctor-patient relationship has vanished. Research and progress are in the doldrums there.

God forbid to American medicine and patient care such a fate!

THE VASOPRESSOR EFFECTS OF SMOKING

The current issue of *The Heart Bulletin* presents an article reporting research done at the Mayo Clinic concerning the effects of smoking and nicotine administration on the circulation in normal persons, in hyperreactors to the cold pressor test, and in known hypertensives. The work was done by Doctors Roth and Schick who studied the effects of the smoking and inhaling of two-thirds of two commercial cigarettes in 15 minutes.

They found that the skin temperature of the individual varied in response as the metabolic rate, but the blood pressure and pulse showed no such variation. The skin temperature of the toes declined on an average of 4.5° Fahr. and that of the fingers 5.8° during the smoking.

The average of blood pressure increase in normals was 20/14 mm. Hg. The pulse rate increased an average of 36 beats per minute within an increase range of 20 to 52 beats. The electrocardiogram showed changes in heart rate, decrease in the T wave amplitude, and, in one instance, inversion of the T wave. In the hyperreactors and in known hypertensives, corresponding results were noted.

The investigators did similar tests using glucose solutions intravenously and introducing corresponding amounts of nicotine unbeknown to the subjects with resultant similar findings.

They conclude that "the effect of smoking tobacco on the blood pressure of subjects or patients with inherently hyperreactive vascular systems . . . is the result, at least in part, of the nicotine in the tobacco which produces vasoconstriction. The hypertensive patient, then, would do well to give up smoking."

PUBLIC HEALTH EVERYBODY'S BUSINESS

In a recent report, the National Health Education Committee asserted that between 1943 and 1957 a total of 1,823,175 lives were spared because of the application of new medical discoveries to the control of several specific devices which resulted in a decline in mortality from those ills. Also, that the earnings of this many people, in 1957 alone, would amount to $3,600,000,000. They paid in federal taxes alone, during 1957, a total of $623,000,000.

It is not my intention to equate medical research and public health and our motives in trying to save lives are not related to perpetuating tax payments. But it is also true that every time a disability or death is averted, public health makes a material contribution to the income of the state and nation. And, as a businessman, it seems to me that this is one side of the coin that should be exposed more frequently for the benefit of those who feel that expanded programs for public health are becoming too burdensome.

For example, West Virginia has the dubious honor of ranking third among the states for the

number of persons in mental institutions because of syphilis. We also know that it costs us about $10,000 for every patient in a mental institution. Last year alone, the Bureau of Venereal Disease Control of the State Department of Health uncovered 1,508 new cases of syphilis here. And, this bureau operated with a total budget of $41,950, of which $34,080 represented the federal appropriation and $7,870 the state appropriation. Furthermore, this small allotment for venereal disease control not only saved our taxpayers an incalculable amount for institutionalization of syphilitic psychotics in future years but covered all of the bureau's activities in the prevention and control of all venereal disease.

It is much the same story every time we find an early undiagnosed case of tuberculosis and get it under treatment; when we protect the family and other contacts from infectious cases; when we prevent polio and other contagious diseases by promoting early immunization; when, through programs for early detection, we save the lives of cancer patients; when we protect water, milk and food supplies and prevent typhoid and dysenteries; when we get people out of beds and back on the job by improving services in nursing homes and by providing nursing care in the home.

In West Virginia, much attention is being given now to finding ways to bolster our sagging economy. Here, also, public health programs can pay dividends. We have a tremendous job to do in environmental health and we can make our state doubly attractive to industry and tourists if we follow through on it. But first we must attack aggressively the problems of air and water pollution, trash and sewage disposal, insanitary restaurants, rest rooms and other tourist facilities, school health programs, industrial hygiene programs. And, like other public health activities, our initial investment in environmental health is infinitesimal compared to the returns it will pay.

Finally, I wonder if anyone could calculate the worth of the lives that have been saved through chlorination of water supplies; or, if in the future, anyone will try to estimate the savings on dentistry because we now promote fluoridation of water.

Last month, the Board of Public Works approved a budget of $1,260,984 for operating the State Health Department during fiscal year 1961-62, a substantial increase over the current year, to be sure, but barely enough to support a minimal public health program. Most of the increase is earmarked for financial aid to county health departments.

While the Legislature is considering approval of our budget the question is bound to arise as to how much we can afford to spend on public health. If we are to weigh the issue logically, I believe we must change our thinking on the subject and ask just how much we can afford *not* to spend for these vital services.—*Guest Editorial by Phill McDaniel of Beckley, Chairman, West Virginia Board of Health.*

HOLD FAST TO THAT WHICH IS GOOD

The spectacular advances of science and technology in the field of medicine during the past few decades present a story that is familiar to everyone.

In approximately the same period of time, the doctor seems to have lost much of the esteem and affection of the general public which gratefully accorded them to past generations of our profession.

Just how and why has this come about?

That the practice of medicine is better than "In The Good Old Days," and that results have improved enormously cannot be questioned. So, where can we look for the explanation? Has the current trend to emphasize the sciences at the expense of the humanities invaded the medical profession? These questions are more easily asked than answered.

Robert Louis Stevenson's eulogy and Ian MacLaren's heart warming "A Doctor of the Old School" present a picture of the doctor which we like to think is a true one and which the present generation can ill afford to forget.

The late Dr. John M. T. Finney liked to talk about "The Imponderables in Medicine," courage, the will to live, and faith, not only in the doctor but in some power that could come to the aid of both patient and doctor. We would all do well to recall more frequently the famous aphorism of Ambroise Pare, "I dressed him, God healed him."

The present generation of medical students and recent graduates must certainly be imbued with the sense of dedication to the relief of human suffering which has traditionally inspired our profession, or they would never have undertaken and persisted in a course of training which entailed from four to ten years of hard work.

It would seem that the inevitable attention to the acquisition of skills, and the accumulation of specific knowledge of disease and its treatment, has tended to make us lose sight of the fundamental purpose for which the training was undertaken. The role of the trusted guide, counsellor,

and friend need not be lost just because the doctor of today has so much more to offer his patient than his grandfather had. Doctors as a rule—and the writer is no exception—fight shy of expressions which might be interpreted as "preaching," but it does not seem too much to suggest that the teachers in our medical schools, and those to whom young men come for advice and counsel, take the time and trouble to help them understand and appreciate the high ideals and responsibilities of our great profession.

"Whatsoever things are true, whatsoever things are honest, whatsoever things are just, whatsoever things are pure, whatsoever things are lovely, whatsoever things are of good report, if there be any virtue, and if there be any praise, think on these things." (Philippians 4:8).—Alfred P. Jones, M. D., in Virginia Medical Monthly.

AMA TO ASSUME NEW LEADERSHIP

". . . *Resolved*, that the House of Delegates directs the Board of Trustees and the Council on Medical Service to assume immediate leadership in consolidating the efforts of the American Medical Association with the National Association of Blue Shield Plans, the American Hospital Association and the Blue Cross Association into maximum development of the voluntary non-profit prepayment concept to provide medical care for the American people. . . ."

By this resolution, adopted in Washington, November 30, 1960, the AMA served notice of its firm commitment to the voluntary non-profit plans as the primary instrument through which America's free medical profession and its voluntary hospital system hope to meet the challenge of the future in providing medical services.

This resolution also placed the AMA in its rightful place of leadership in supporting and guiding the development of Blue Shield. It goes far to assure that organized medicine at the national level will henceforth demonstrate the same direction and support for Blue Shield that the leaders of so many state and county components of the AMA have given local Blue Shield plans from their very inception.

A great opportunity confronts the AMA in this new role. By exercising bold and imaginative leadership, the AMA may be able to help raise the general level of Blue Shield performance to the point where the "voluntary non-profit prepayment concept" will have proved its case to the American people. Certainly there's much to be done to establish standards for Blue Shield and to bring the performance of all plans up to the level of the best.

It's none too soon for this leadership to make itself felt!

Sports for Children

In recent years, the subject of athletics for children has become a highly controversial topic. Controversy first developed following the statements made by General Hershey concerning what was thought to be an excessive rejection rate of draftees during World War II. It was intensified later by statements of Kraus and Weber indicating that our children were, to a frightening degree, unfit physically. In both these cases, the statements were at variance with the facts as known to the medical profession.

Unfortunately, the medical profession has not become articulate on the subject until recently, and in the meantime the physical training specialists and the lay public have become adjusted to the idea of a great need for activity on the part of children. The physical education people who take an interest in the topic act on the theory that what is needed is greater opportunities for competitive team play, and in line with their own youthful experience, they lean to football and baseball.

It is a sad commentary that the modern trend toward the varsity concept of athletics for children of junior high school age, or younger, does far more harm than good. It produces probably a hundred spectators for every participant. And beyond this, it produces athletes in many sports who devote the formative years of their lives to a sport that they can never pursue in their adult lives. This, I think, is the crux of the matter. For there is no reason for concern about the physical welfare of our children; rather, there is considerable need for thought about our adults.—R. A. McGuigan, M. D., in Journal, Iowa State Medical Society.

The Psychopath

Every physician, regardless of the nature of his practice, encounters from time to time a patient whom he classifies as a psychopath. In so doing, he has expressed in one word the idea of hopelessness, opprobrium, and mystery.

The mystery has to do with the reason for the character disorder. A variety of causes has been assigned. Historically, it has shifted over the years, ranging from constitutional or inbred inferiority and on toward mental deformity and faulty emotional development. It has long been agreed that there is neither a lack of intelligence nor is there a mental disease present.

Some physicians adhere to the belief that an organic defect is present from which the patient cannot recover. For example, they believe nearly all persons who commit crime are psychopaths. They overlook the fact that criminality of long standing ends in middle age. Except for crimes of fraud, sex, and murder, crime can be said to end at 40. Prison records support this view.—Paul L. Schroeder, M. D., in Journal, Medical Assn. of Georgia.

GENERAL NEWS

Dr. Leonard W. Larson To Speak At 94th Annual Meeting

The Program Committee of the West Virginia State Medical Association has announced that Dr. Leonard W. Larson of Bismarck, North Dakota, who will be installed as president of the American Medical Association at the annual meeting in New York in June, will be among the guest speakers at the 94th Annual Meeting of the West Virginia State Medical Association at The Greenbrier in White Sulphur Springs, August 24-26.

Leonard W. Larson, M. D., President Elect American Medical Association

Dr. Halvard Wanger of Shepherdstown, the chairman, said that Doctor Larson has accepted an invitation to be the guest speaker before the final session of the House of Delegates on Saturday afternoon, August 26.

Native of Minnesota

Doctor Larson was born in Clarkfield, Minnesota, and was graduated magna cum laude from the University of Minnesota Medical School in 1922. He received his bachelor of science degree in 1920 and his college preparatory education at St. Olaf Academy, Northfield, Minnesota.

Following a brief period of general practice in Northwood, Iowa, he returned to Minnesota for postgraduate work in pathology. He joined the Quain and Ramstad Clinic in Bismarck in 1924 and has been a clinic partner since 1939. He also serves as pathologist for two hospitals in Bismarck.

He is a past president of the American Society of Clinical Pathologists and was awarded a Certificate of Highest Merit by that organization. He has written numerous scientific articles on laboratory medicine, with particular emphasis on tumor diagnosis and treatment.

For his contributions to the science of cancer control, Doctor Larson received a Gold Medal in 1953 from the American Cancer Society, having served on the Society's board of directors since 1945, including a term as vice president.

Active in Organized Medicine

He was a member of the AMA House of Delegates from 1940 to 1950, and, as chairman of the AMA Correlating Committee on Lay-Sponsored Health Plans, he was instrumental in formulating the "Twenty Principles" covering the relationship between the medical profession and the plans.

Doctor Larson was subsequently appointed chairman of the Commission on Medical Care Plans, which after four years of study, submitted its report to the House of Delegates. This so-called Larson report included such important subjects as free choice of physician and the relationship of the third party mechanism to the practice of medicine, in addition to the first comprehensive statistical analysis of all types of medical care plans in operation at the time.

He was elected a member of the AMA Board of Trustees in 1950 and served as chairman, 1958-60. He was named president elect at the annual meeting in Miami Beach in June, 1960.

Doctor Larson was married to the former Ordelia Miller in 1923, and they have two married daughters, Mrs. George Mitchell of Bismarck, North Dakota, and Mrs. John Collett of Lenoir, North Carolina.

Program Committee Busy

In addition to Doctor Wanger, the other members of the Program Committee are Drs. Hu C. Myers of Philippi and Thomas H. McGavack of Martinsburg.

The Committee is busy contacting potential speakers for the scientific sessions and once again some of the leading physicians and surgeons in the country will be among the list of guest speakers.

The Committee announced that there will be three general scientific sessions which will be held mornings during the three-day meeting. As usual, meetings of the Association's sections and affiliated societies and associations will be held during the afternoon hours.

Meetings in Convention Unit

Once again, the entire convention program will be presented in the Convention Unit of The Greenbrier, which is completely air-conditioned. Scientific and industrial exhibits will be housed throughout the meeting in the beautiful Chesapeake Hall.

Further details of the annual meeting at The Greenbrier in August will be published in future issues of *The Journal*. The complete program will appear in the issue for August.

Mental Health Dinner in Charleston, Feb. 7

Dr. William F. Sheeley of Washington will be the guest speaker at the annual dinner meeting of the West Virginia Association for Mental Health which will be held at the Daniel Boone Hotel in Charleston on February 7. The dinner will be co-sponsored by the American Legion.

Doctor Sheeley, who is Chief of the General Practitioner Educational Project, American Psychiatric Association, will discuss mental health needs in West Virginia.

Relocations

Dr. Alfred W. Owre, Jr., formerly of Aurora, Preston County, has moved to Colby, Kansas, where he will continue in general practice with offices at 270 North Franklin Street in that city. He has been accepted as a member of the Kansas Medical Society by transfer from the West Virginia State Medical Association.

* * * *

Dr. Edward V. Henson, medical director of the Union Carbide Chemicals Company plant in South Charleston since 1947, has accepted appointment as medical research associate in the general office of the medical department of the Standard Oil Company of Indiana, in Chicago. His post office address is Box 5910-A, Chicago 80, Illinois.

Doctor Henson has assumed his new duties in Chicago, and his family will move there the first of February.

Doctors in the Service

Dr. L. K. Musselman, formerly of Whitesville, has been released by the Medical Corps of the U. S. Army with the rank of Captain. He has been serving with our armed services since January, 1958, and has seen service in Korea.

Doctor Musselman has accepted a five-year fellowship in psychiatry at the Menninger Foundation in Topeka, Kansas. His address is 2424 Shunga Drive in that city.

Dr. Merle S. Scherr Participates In Argentine Allergy Confs.

Dr. Merle S. Scherr of Charleston was among physicians from 20 North and South American countries who participated in a series of allergy conferences in Argentina, November 28-December 3. The meetings were held in Buenos Aires and Rosario, and were part of the observance of the 150th anniversary of Argentine independence.

Doctor Scherr presented several scientific papers during his visit in Argentina and also participated in a

Dr. Merle S. Scherr of Charleston, right, presents flag of the State of West Virginia to officials of the University of Buenos Aires, Argentina. On the left is Dr. Risieri Frondizi, Rector of the University, and shown holding the flag is Dr. Alberto Bonhour, Dean of the School of Medicine.

three-day roundtable panel discussion on allergy in Buenos Aires. Following an appearance before the Argentine Allergy Society in Rosario, he was named an honorary member of that organization.

He presented the flag of West Virginia and a letter of greetings from Governor Cecil H. Underwood to the Medical School of the National University of Litoral, in Rosario, and also to the School of Medicine of the University of Buenos Aires. In turn, officials of both universities presented flags to Doctor Scherr with the request that they be given to Governor Underwood.

In addition to the scientific sessions, Doctor Scherr had conferences with the Minister of Public Health of Argentina, the United States Ambassador to Argentina, the Governor of the Province of Santa Fe, and several administrative officials of the two medical schools.

Doctor Scherr said that these health officials expressed hope that an exchange program involving medical students and physicians in the United States and Argentina might be established. He said the deans of the medical schools also expressed the belief that graduates of their schools would benefit substantially from intern and resident training in this country.

The highest wisdom and the highest genius have been invariably accompanied with cheerfulness. We have sufficient proofs on record that Shakespeare and Socrates were the most festive companions.—Thomas Love Peacock.

Medical Career Day for Scouts In Parkersburg Hospitals

More than 100 Explorer Scouts in the Parkersburg area participated in a Medical Career Day in that city recently. Hosts for the event were the Parkersburg Academy of Medicine and St. Joseph's and Camden-Clark Memorial hospitals.

The one-day meeting included guided tours of the hospitals and discussions concerning careers in medicine and allied fields. Several members of the Academy participated in a question and answer period which concluded the program.

Dr. William E. Gilmore, president of the Academy, said he believed physicians, hospital personnel and the scouts all benefitted from the experience. He said similar events are planned during the coming year.

Increase in Blue Shield Enrollment

The National Association of Blue Shield Plans reported recently that more than 1,847,000 persons enrolled in the 74 Blue Shield Plans located in North America during the first nine months of 1960. During the same period the Plans paid out approximately $555,000,000 for care rendered to members.

The Association said that membership in the 74 Plans reached 46,640,348 as of September 30, 1960, an enrollment of one out of every four Americans. Included in the enrollment figures for the first time are approximately 938,000 Federal employees who selected Blue Shield under the recently enacted Federal Employees Health Benefits Program.

Medical Meetings, 1961

The following is a partial list of national, state and district medical meetings scheduled for 1961:

Mar. 1-2—Bunts PG Course in Arterial Vascular Disease, Cleveland.
Mar. 6-8—New Orleans Grad. Med. Assembly, New Orleans.
Mar. 6-9—S. E. Surgical Congress, Miami Beach, Fla.
Mar. 12-17—American College of Allergists, Dallas, Texas.
Apr. 3-8—Gill Memorial's Spring Conf., Oph. and Otol., Roanoke, Va.
Apr. 6-8—W. Va. Acad. Oph. and Otol., White Sulphur Springs.
Apr. 10-12—Am. Acad. Pediatrics, Washington, D. C.
Apr. 14-15—W. Va. Chap. ACS, White Sulphur Springs.
Apr. 14-15—AMA Medicolegal Conf., Louisville, Ky.
Apr. 17-20—AAGP, Miami Beach, Florida.
Apr. 21-22—W. Va. St. Soc. Med. Technologists, Wheeling.
May 8-12—Am. Coll. Physicians, Miami Beach, Fla.
May 19-21—W. Va. Chap. AAGP, Civic Center, Charleston.
May 22-25—Am. Urological Assn., Los Angeles.
June 22-26—ACCP, Hotel Commodore, New York City.
June 26-30—Annual Meeting, AMA, New York City.
Aug. 24-26—W. Va. St. Med. Assn., The Greenbrier, White Sulphur Springs.
Oct. 2-6—Am. Coll. Surgeons, Chicago.
Nov.—Southern Medical Assn., Dallas, Texas.
Nov. 28-Dec. 1—AMA Clinical Meeting, Denver.

Dr. Margaret T. Ross Named Psychiatrist For Kanawha County Schools

Dr. Margaret T. Ross of Charleston has been appointed consulting psychiatrist for the Kanawha County School system on a part-time basis. She assumed her duties early last month.

Doctor Ross, former Director of the West Virginia State Department of Mental Health, is the first psychiatrist employed by the county school system. The Kanawha County Board of Education announced that she will work in conjunction with Mr. James Atkins, school psychologist, in helping the county's 60,000 school children.

Doctor Ross will continue her private practice in Charleston. She also is executive secretary of the West Virginia Association for Mental Health.

Another $500 Contribution To Scholarships Fund

A contribution of $500 to the WVU Medical Scholarships Fund of the West Virginia State Medical Association has been received by the State Medical Association from Mr. Harry H. Carnahan of Huntington, President of The Medical Arts Supply Company. This is the third successive year that Mr. Carnahan has contributed the sum of $500 to the Scholarships Fund which is maintained by the Association.

Under the program which was established a few years ago, three students have already been awarded scholarships of $1,000 per annum each to the WVU School of Medicine. They are Larry Hemmings of Charleston, who is a junior; Terry Tallman of Alma, Tyler County, a sophomore; and Glenn Buchanan of Gilbert, Mingo County, a member of the first-year class.

Dr. J. P. McMullen of Wellsburg is chairman of the Association's Committee on Medical Education and Scholarships.

Training to Overcome a Disability

The average young man of sedentary habit, if otherwise healthy, can easily cover a mile in 10 minutes if pushed to it. After a week's training he can probably do it in 6 or 7 minutes; and in a month or so, if driven, in 5 or 6 minutes. But if he wants to run a mile in 4 minutes, he must train intensively for a long time; he would probably have had to begin in his 'teens, gradually improving his performance as he gained experience of competitive athletics.

In rather the same way a patient with a disability, such as an osteoarthritic hip, has to go into training if he wishes to overcome the disability and live a normal life.—J. D. G. Troup, M. R. C. S., in The Lancet.

Dr. William S. Middleton of Washington (seated), Chief Medical Director of the Veterans Administration, was the guest speaker at the annual joint meeting of the Parkersburg Academy of Medicine and Auxiliary held in Parkersburg on January 5. Shown in the photograph are, seated, left to right, Mrs. Charles H. Barnett, president of the Woman's Auxiliary; Doctor Middleton; and Mrs. Clark K. Sleeth of Morgantown, president of the State Auxiliary. Standing, left to right, Dr. Clark K. Sleeth, Dean of the WVU School of Medicine; Dr. John W. Hash of Charleston, president of the State Medical Association; and Dr. William E. Gilmore, president of the Parkersburg Academy of Medicine. (Photo courtesy, The Parkersburg News).

Symposium on Pediatric Surgery in New York

A Symposium on Pediatric Surgery will be presented at the New York University Medical Center in New York City, May 4-6, and will feature the latest methods and techniques of both diagnosis and surgical management of surgical conditions in the newborn and older children.

Tuition fee for the three-day course is $75. Further information may be obtained by writing to the Office of the Associate Dean, New York University Postgraduate Medical School, 550 First Avenue, New York 16, New York.

New Superintendent at Hopemont

Dr. Fred A. Kennedy has been named superintendent of Hopemont Sanitarium to succeed Dr. Charles E. Smith who resigned effective January 1, 1961. Doctor Kennedy has been serving as assistant superintendent at the institution since last September.

Public Sentiment

Public sentiment is everything. With public sentiment nothing can fail; without it nothing can succeed. He who molds public sentiment goes deeper than he who enacts statutes or pronounces decisions; he makes statutes or decisions possible or impossible to execute. —Abraham Lincoln.

AMA Names New Secretary Of Council on Drugs

Dr. William C. Spring, Jr., of Brooklyn, New York, has accepted appointment as Secretary of the Council on Drugs of the American Medical Association. He succeeds Dr. Harold D. Kautz, who resigned last July to accept a position with Abbott Laboratories.

Doctor Spring, who assumed his new duties last month, has been serving as Medical Director of the Laboratories Division of the Charles Pfizer and Company.

A native of Glen Ridge, New Jersey, he holds degrees from Wisconsin, Duke and Columbia universities.

The AMA Council on Drugs is one of the oldest within the Association. Since its formation in 1905, when it was known as the Council on Pharmacy and Chemistry, the Council has reported to the medical profession on the reliability, therapeutic value and limitations of pharmaceutical products.

Dr. Heinz Lord New Secretary General Of World Medical Association

Dr. Heinz Lord of Sea Cliff, New York, has been named Secretary General of the World Medical Association to succeed Dr. Louis H. Bauer, retired. A native of Peru, he was formerly engaged in the practice of his specialty at Barnesville, Ohio.

Doctor Bauer, a past president of the American Medical Association, has served as Secretary General of the Association since shortly after its organization in April, 1948. During his tenure of office the membership has increased from 21 to 56 countries. He will continue as a consultant to the World Medical Association.

New Association Members

Dr. Harry A. Jackson, 308 33rd Street, S. E., Charleston (Kanawha). Doctor Jackson was born in Gassaway and was graduated from West Virginia University. He attended the two-year School of Medicine at the University and received his M. D. degree from the Medical College of Virginia in 1955. He interned at Charleston Memorial Hospital, 1955-56, and served a residency at the same hospital, 1957-60. He served with the United States Army, 1945-47. His specialty is internal medicine.

* * * *

Dr. John J. Schaefer, 1205 Quarrier Street, Charleston (Kanawha). Doctor Schaefer, a native of Yonkers, New York, was graduated from Manhattan College and received his M. D. degree from New York Medical College in 1948. He interned at Fordham Hospital in New York, 1948-49, and served residencies at several hospitals, 1949-60. He served for two years with the Medical Corps of the United States Army. His specialty is thoracic surgery and peroral endoscopy.

What we do in college is to get over our littlemindedness. Education—to get it you have to hang around till you catch on.—Robert Frost.

The West Virginia Medical Journal

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Situs Inversus Totalis*
(Complete Visceral Transposition)
(With Case Reports)

Walter H. Gerwig, Jr., M. D., and Albert J. Grant, M. D.

Even though transposition of the viscera no longer is considered a rarity, it occurs infrequently enough to stimulate interest. Classical total situs inversus apparently does not in any way make the individual more susceptible to medical mishaps; neither does it offer any protection from the illnesses and diseases that affect those persons with normally situated organs. This by no means is true of partial situs inversus, in which the possibility of coexisting congenital anomalies is strong. In partial transposition, certain complexes develop often enough to be recognizable and be categorized.

It is our purpose to report three cases of total situs inversus (mirror image transposition) in which the patients lived normal lives, unaware of the long-standing changes in anatomical makeup. All three were affected by, but were no more susceptible to, conditions that are certainly common to the general population. By reporting these cases, we are provided with a basis for mentioning also the more common types of partial transposition, as well as the associated congenital anomalies that occur most frequently.

It becomes evident, when one reviews the literature, that conditions such as appendicitis, gallbladder disease and perforated peptic ulcer find their way into reports, not because of the diseases themselves but because of their unusual occurrence in an individual in whom the organs are transposed.

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Submitted to the Publication Committee, August 29, 1960.

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- **Albert J. Grant, M. D., Member of the Surgical Staff, Veterans Administration Hospital, Clarksburg, W. Va.**

Case Reports

Case 1.—H.R., a 28-year-old white male, was admitted to the hospital July 17, 1956, because of abdominal pain, nausea and vomiting of about twenty hours' duration.

At the age of ten, an examining physican had noticed the heart sounds to be most marked over the right anterior chest, and an x-ray at that time had revealed dextrocardia. No further studies were done. Meanwhile, the patient apparently had enjoyed good health, this being his first hospital admission. He had never before had any attack similar to his present illness.

The patient stated that just before going to bed the night prior to admission, he began "to have cramps in the pit of my stomach." As the pains got worse, he vomited and continued to feel nauseated. When he got up next morning, the pains seemed to be more on the right side and he didn't feel like trying to eat, but did go to work. About six hours prior to admission, he left work, went to his physician, and was referred to the hospital.

On admission the pulse was 100, temperature 99.6 F. and white blood count 13,500. The patient's apical heart beat was in the right chest, liver dullness in the upper left and gastric tympany in the upper right quadrants, respectively. Flat x-ray of abdomen seemed to substantiate an impression of total situs inversus and a repeat film, taken following a swallow of barium, rendered unequivocal proof.

The pain and tenderness were most marked in, and practically limited to, the right lower quadrant. It was suggested, however, that in the mirror image, visceral pain itself may not always become transposed.

The situation was explained to the patient, and operation was decided upon.

At operation, using a left McBurney approach, an acute suppurative appendicitis was encountered and the appendix easily removed from its location in the left lower abdominal quadrant. The immediate postoperative and subsequent follow-up courses were uneventful.

Case 2.—C.A., an 82-year-old white female, was admitted to the hospital August 25, 1958, with a past history of intermittent attacks of jaundice associated with epigastric pain, nausea, vomiting and fever. Even though these episodes had occurred over the past eight or ten years, they apparently had been mild, for on no previous occasion had she resorted to hospital care.

Other than the attacks just described, this elderly lady had been in reasonably good health. In December, 1955, however, she was sent to a hospital as an out-patient for an x-ray of the chest because of symptoms which she described as a "deep chest cold with lots of coughing."

The onset of the patient's present illness began rather insidiously about two days prior to admission, associated with nausea and, later, vomiting, anorexia, dehydration and epigastric discomfort. She was put on parenteral feedings and after about forty-eight hours began to show clinical evidence of jaundice, which was supported by laboratory tests.

On the third day following admission the patient was seen in surgical consultation. Examination revealed an acutely ill, moderately jaundiced, somewhat dehydrated, elderly white female who was confused and disoriented. A firm, fixed mass approximately 5 cm. in diameter was located under the costal margin in the left upper quadrant of the abdomen. Any attempt to palpate the mass resulted in screams from the patient because of excruciating pain and marked tenderness.

Immediate upright and supine x-rays of the abdomen were taken which showed "gaseous distention." The roentgenologist indicated the possibility of abdominal transposition of the viscera in that the gas shadows in the colon ex-

Figure 1—Case 2

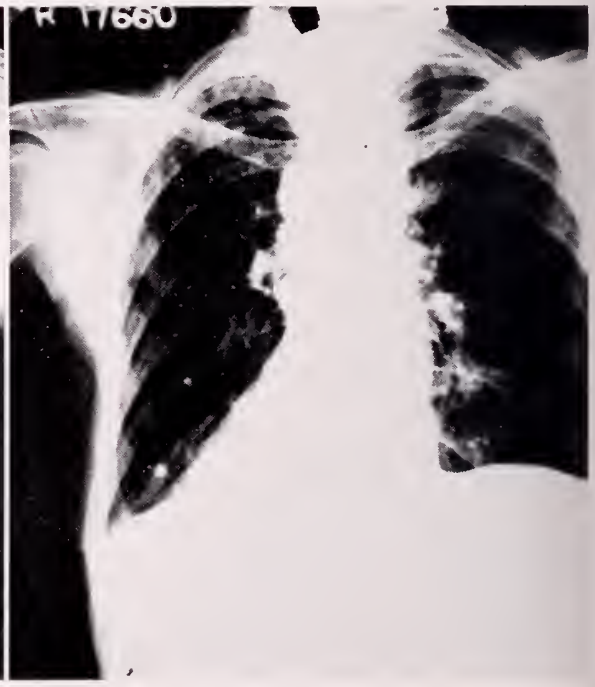

Figure 2—Case 2

Figure 1—Case 2. Chest x-ray taken December 20, 1955, showing how the correct indicator had been "blacked out" and an incorrect "R" substituted.

Figure 2—Case 2. X-ray of chest taken almost three years later, August 28, 1958. The indicator is properly applied and true existence of dextrocardia is obvious.

tended high into the right upper quadrant and the liver opacity was on the left. (It is of interest to note that when the x-ray of the chest dated December, 1955, was reviewed, it became evident that the technician apparently had thought, as has happened not infrequently, that he had mislabeled the film. To correct what he thought was an error, he altered the letters designating the side as he thought it should be (Figure 1). A chest film revealed dextrocardia and indicated total situs inversus (Figure 2).

Immediate operation was advised and performed through an upper left paramedian incision, with removal of an acutely inflamed, severely distended, early necrotic gallbladder from its position in the upper left abdomen. Common duct exploration was negative, except to confirm that it coursed from the left-sided liver in a mirror image. Postoperative recovery was uneventful and the patient, sixteen months later, was found to be quite well.

Case 3.—B.R.M., a 34-year-old white male, was admitted to the hospital September 15, 1958, because of symptoms consisting of bloating, belching, heartburn and occasional nausea and vomiting that had recurred intermittently during the past six to eight years. Prior to admission the patient had had several chest x-rays, but on each occasion had been told that they were negative.

In the course of his workup, it was discovered that he had dextrocardia (Figure 3), and subsequent gallbladder study (Figure 4) and an upper gastrointestinal series (Figure 5) revealed total situs inversus. This was the first time in his thirty-four years of life that the patient had been informed that his organs were located in mirror image fashion.

The patient's symptoms were felt to be due chiefly to excessive worry, anxiety, tension and stress, since no evidence of an organic gallbladder or gastrointestinal lesion could be demonstrated. He improved on diet, medication and psychotherapy, and was discharged.

Discussion

Total situs inversus is rare, but not to the extent that its possible existence can be completely ignored. Not infrequently, as in one of our cases, an x-ray technician may attempt to correct what he thought was an error on his part, when the designating marker and location of the heart do not match in the manner to which he is accustomed, by changing the location of the marker. If the radiologist is presented with a film on which the side label is obscure, he probably would read it as normal by visualizing it in reverse. All too often in routine work, the physician may detect the apical beat in the right anterior chest or learn from x-ray that the heart is on the right side, and then fail to extend the search to determine the position of the abdominal viscera.

As shown by Northup and Van Liere, a person with total transposition undergoing electrocardiographic study may, by reversing the leads, show a perfectly normal tracing. By the same

Figure 3—Case 3

Figure 4—Case 3

Figure 5—Case 3

Figure 3—Case 3. Chest x-ray revealing dextrocardia.

Figure 4—Case 3. Cholecystogram. The dye-filled gallbladder is seen in the left abdomen just below the density that represents liver. The colon is partially outlined and implies that the splenic flexure is situated in the upper right quadrant. A spot film limited to the right side would not have included the gallbladder and might have led to an impression of "non-function."

Figure 5—Case 3. Upper gastrointestinal series shows the axis of the stomach to be from upper right to lower left, with the "bulb" and "duodenal loop" on the left side.

token, it is possible to obtain the characteristic tracing of dextrocardia by reversing the leads in a normal individual. With the advance of knowledge and interest in cardiology, the possibility of this type of error has been reduced to infinitesimal proportions.

There are recorded instances in which patients with situs inversus, undergoing right upper quadrant spot-film cholecystography, have been told incorrectly that they possessed a nonfunctioning gallbladder. A film of the entire abdomen would have visualized the dye-containing viscus on the left side.

Since the time of Blegen's comprehensive review early in 1949, numerous case reports of relatively common conditions continue to appear in the literature. Obviously, these are recorded, as are our own cases, solely because of the coexisting situs inversus. Some of the surgical problems reported in the literature as occurring in patients with situs inversus are as follows:

- Appendicitis (Lesser & Zuckerman, 1958; Abel, 1949; Nagaratnam & Kotagama, 1957; Jules, 1956; Winter & Dyke, 1953).
- Appendicitis complicating pregnancy (Richard, 1950).
- Lesions of the gallbladder
  - Carcinoma (Shank & Stafford, 1953)
  - Echinococcosis (Abramor & Ingber, 1954)
  - Acute inflammation (Seidenberg, Bernard & Hurwitt, 1956; Marks & Pokroy, 1955; Viger & Houle, 1957; Munnell & Ponka, 1955).
- Volvulus of the colon (Schmauss, 1950; Jacobson & Camp, 1951).
- Hiatus hernia (Rosenberg & Rosenberg, 1949).
- Meckel's diverticulitis (Jenkins & Addlestone, 1956).
- Duodenal obstructions (Fox & Crawford, 1950).
- Gastric resection for ulcer (Shaw, 1950; Garcia-Baron, 1953).
- Perforated duodenal ulcer (Cottini, 1949; Fogelson, Kerrigan & Swerdlow, 1951).
- Ruptured spleen (Harbison, Patton & Moyer, 1954).

Positive knowledge of the cause of situs inversus totalis is lacking. The origins of this maldevelopment are obscure, frequently debatable and explained by many hypotheses.

Cleveland's theories embracing the influence of a persistent right umbilical vein and the direction of determination by the umbilical vessels and the umbilical cord were proposed in 1926. Transposition of the digestive tract, however, is only one feature of the more general condition known as situs inversus. Arey, in 1946, elucidated somewhat the mechanics of transposition of abdominal viscera. He held that the development of the embryonic organs occurs in definite dependent sequence, and the interdependent nature of this system makes its possible for an initial organ to undergo a reversal of position. This is followed by a similar reversal involving all succeeding stages of that organ. For example, rotation of the stomach to the right results automatically in transposition of the intestine. It would seem that the prime determining factor is the normal spiral organization of the developing gut which, when reversed in direction, automatically leads to transposition.

Cockayne endeavors to demonstrate the cause for transposition of abdominal viscera in the activities of a recessive Mendelian trait. Since genes are hereditary determiners in plant and animal forms and are self-perpetuating particles in chromosomes, it is believed they furnish the key to the enigma of total or partial transposition of viscera. The influence of the gene in recessive mutation is recognized by the distribution of this recessive Mendelian trait in the families in which it occurs by the ratio of children with the recessive trait to normal children in the same paternity, and by the rate of consanguinity of the parents, one or more of whose children have the trait.

Not without significance is the association of congenital morbus cordis*, pulmonary stenosis, patent interventricular septum, tetralogy of Fallot and a host of other malformations with transposition of abdominal or thoracic viscera, or both. All known cardiac malformations are represented and others as well, including multiple spleens, ectopic spleen, imperforate anus, duodenal atresia, persistent Meckel's diverticulum, horseshoe kidney, single kidney, polycystic kidney, esophageal malformation and malformation of the urethra. Kartagener's syndrome (hypertrophic rhinitis, nasal polyposis, sinusitis and bronchiectasis) occurs in frequent association with complete transposition of the viscera. These appear rather consistent in conjunction with the recessive trait of Mendel.

Rapidly expanding biochemical investigations, as conducted by Hoagland, Kornberg, Grunberg-Manago and others, have probed into the nature of genetic mechanisms in plant, bacterial and animal forms. Deoxyribonucleic acid (DNA) found in the cell nucleus is known to transmit genetic information in the organisms that contain it. The biosynthesis of nucleotide components of DNA is currently of paramount interest, since nucleotides determine the composition of the amino acid structure of proteins. Mutations of nucleotides are reflected in the resulting protein material. There may be promise in the belief that ribonucleic acids (RNA) are essential to protein synthesis and provide templates for the formation of specific protein

***Cockayne is of the opinion the gene which determines complete transposition of the viscera carries with it a liability to cardiac malformation.**

molecules. Specificity or nonspecificity of RNA and the manner of synthesis of RNA itself require careful elucidation. It has been shown that RNA in the tobacco plant virus (like DNA in bacterial cells) is the carrier of genetic information.

Summary

Three cases of total situs inversus are reported. Certain conditions with surgical implications are discussed. Occasional factors that may result in delay or failure in arriving at a correct diagnosis are brought out. Theories as to the etiology of this congenital anomaly are reviewed and recent works that may have a bearing on the problem are mentioned.

Acknowledgment

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References

1. Abel, W. G., III: Acute Appendicitis with Concomitant Situs Inversus. Report of a Case. New England J. Med. 241:97-98 (July 21) 1949.
2. Abramor, J. A. & Ingber, E.: Equinococo de la Vesicula Biliar y Nefropatia en un Caso de Situs Viscerum Inversus Totalis, Semana Med. 104:107-111 (Jan. 28) 1954.
3. Arey, L. B.: Developmental Anatomy. Textbook and Laboratory Manual of Embryology, ed. 5, Philadelphia, W. B. Saunders Co., 1946.
4. Blegen, H. M.: Surgery in Situs Inversus, Ann. Surg. 129:244-259 (Feb.) 1949.
5. Cleveland, M.: Situs Inversus Viscerum. Anatomic Study, Arch. Surg. 13:343-368 (Sept.) 1926.
6. Cockayne, E. A.: Genetics of Transposition of Viscera, Quart. J. Med. 7:479-493 (July) 1938.
7. Cottini, G. F.: Ulcera Duodenal Perforada en un Joven de 17 Anos con Situs Inversus Totalis Bol. y Trab., Soc. Argent. de Cirujonos 10:128-130, 1949.
8. Fogelson, S. J., Kerrigan, J. & Swerdlow, R.: Situs Inversus Totalis and Perforation of Peptic Ulcer, Illinois M. J. 100:140-141 (Aug.) 1951.
9. Fox, P. F. & Crawford, O. W.: Duodenal Obstruction, Situs Inversus and Nonrotation of Colon, Surgery 27:896-901 (June) 1950.
10. Garcia-Baron, A.: Reseccion del Estomago en Situs Inversus, Rev. Clin. Espan. 46:317-318 (Sept. 15) 1952.
11. Grunberg-Manago, M., Ortiz, P. J. & Ochoa, S.: Enzymatic Synthesis of Nucleic Acid-like Polynucleotides, Science 122: 907-910 (Nov. 11) 1955.
12. Harbison, S. P., Patton, V. G. & Moyer, J. F., Jr.: Spontaneous Rupture of the Spleen. Its occurrence in a patient with Situs Inversus, Ann. Surg. 139:248-249 (Feb.) 1954.
13. Hoagland, M. B.: Nucleic Acids and Proteins, Scient. Am. 201:55-61 (Dec.) 1959.
14. Jacobson, H. G. & Camp, W. H.: Situs Inversus of Abdominal Viscera with Volvulus of Large Bowel, Radiology 56:423-426 (March) 1951.
15. Jenkins, L. B. & Addlestone, H. H.: Meckel's Diverticulum in a Case of Situs Inversus, J. South Carolina M. A. 52:326-330 (Sept.) 1956.
16. Jules, P.: Acute Appendicitis in Situs Inversus, J. Med. Soc. New Jersey 53:582-584, 1956.
17. Kornberg, A.: Biologic Synthesis of Deoxyribonucleic Acid. (From the Department of Biochemistry, Stanford U. School of Medicine.) Presented before the Karolinska Institute, Stockholm, Sweden, Dec. 11, 1959.
18. Lesser, A. & Zuckerman, H.: Acute Appendicitis in Situs Inversus, New York State J. Med. 58:67-68 (Jan.) 1958.
19. Marks, C. & Pokroy, M.: Situs Inversus Totalis. Report of a Case Presenting with "Acute Abdomen." South African M. J. 29:526-527 (May) 1955.
20. Munnell, E. R. & Ponka, J. L.: Situs Inversus and Acute Cholecystitis. Report of a Case. A. M. A. Arch. Surg. 71:151-152 (July) 1955.
21. Nagaratnam, N. & Kotagama, L. S.: Dextrocardia, Situs Inversus Totalis and Appendicular Abscess, Post-Grad. M. J., London, 33:287-288 (June) 1957.
22. Northup, D. W. & Van Liere, E. J.: The Electrocardiogram in Situs Inversus. Case Report. The West Virginia Medical Journal 52:169-170 (June) 1956.
23. Richard, N. F.: Perforative Appendicitis Complicating Pregnancy of Woman with Situs Transversus Viscerum, J. Indiana M. A. 43:856-859 (Sept.) 1950.
24. Rosenberg, H. N. & Rosenberg, I. N.: Simultaneous Association of Situs Inversus, Coronary Heart Disease and Hiatus Hernia, Ann. Int. Med. 30:851-859 (April) 1949.
25. Schmauss, A. K.: Volvolus der Flexura Sigmoidea bei Situs Inversus Abdominis Partialis, Zentralbl. f. Chir. 75:399-403, 1950.
26. Seidenberg, B. & Hurwitt, E. S.: Situs Inversus Abdominalis and Chronic Calculous Cholecystitis, A. M. A. Arch. Surg. 73:1055-1057 (Dec.) 1956.
27. Shank, P. J. & Stafford, R. P.: Complete Situs Inversus Viscerus Associated with Cholelithiasis and Complicated by Carcinoma of Gallbladder, Rev. Gastroenterol. 20:167-173 (March) 1953.
28. Shaw, R. E.: Gastric Resection in Situs Inversus Totalis, Brit. J. Surg. 38:122-123 (July) 1950.
29. Viger, L. A. & Houle, M. P.: Cholecystectomy in a Case of Situs Inversus Totalis, J. Maine M. A. 48:8-11 (April) 1957.
30. Winter, B. & Dyke, M.: Left-sided Acute Appendicitis, Canad. M. A. J. 68:278-279 (March) 1953.

. . . diplomacy, at one time, consisted of giving a hand without a handout.

ANON.

Anesthesia in the Complications of Pregnancy*

Vincent J. Collins, M. D.

In obstetrics, all procedures must be motivated by the objective of preserving two lives, the mother's and the baby's. All anesthetics given the mother not only alter her physiology but affect the baby, also, in some manner. To provide the ideal anesthesia, each patient should be individualized and the choice of anesthetic determined by the circumstances. It is the purpose of this paper to review some of the common complications of pregnancy which influence the choice of anesthetic and to consider what will be best for both lives.

The Author

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Complications in the Mother Affecting Pregnancy

The Full Stomach.—The most common complication in obstetrics is the full stomach at the time of delivery. Too often the hazard of food in the stomach is not appreciated and at first view this simple natural gastric state may not appear to be serious. From the viewpoint of the anesthesiologist, however, it always has been dangerous and when it is realized that aspiration of vomitus is the leading cause of maternal death related to anesthesia, it becomes vitally important. In one series, 51 per cent of maternal deaths were due to aspiration of vomitus.

The incidence of emesis in obstetrical patients at time of delivery under anesthesia varies from 20 per cent to 40 per cent. Also, it is fundamental that gastric emptying time is delayed and food still may be present 12 to 18 hours after ingestion of a moderate meal. The delay is due to excitement, onset of labor, pain and sedative drugs.

The tragedy of vomiting and aspiration largely can be prevented by following a few recommendations. In the area of prevention, it is believed that a soft diet should be the rule for the woman near term. When it is known that a patient has ingested a solid meal within 8 hours of onset of labor, the anesthesia method of choice should be regional analgesia. It may take any form including pudendal block, epidural or caudal and low spinal. A low spinal level is emphasized since levels above T-10 themselves are associated with vomiting and occasional aspiration. That such incidents do occur must be fully realized so that there will be no false sense of security. In addition, hypotension must be avoided prophylactically by vasopressors and, should it occur, treatment instituted promptly. Hypotension, with vomiting, occurs after administration of a spinal anesthetic, especially when preanesthetic preparation with a belladonna derivative has been inadequate.

Table 1

MAJOR MATERNAL PROBLEMS AS HAZARDS IN ANESTHETIC MANAGEMENT

1. The Full Stomach
2. Cardiac Disease
3. The Diabetic Pregnant Patient
4. Endocrine Imbalance

When general anesthesia is mandatory because of other valid medical considerations, and a meal has been ingested within 6 hours, endotracheal intubation is essential and, preferably, is accomplished while the patient is awake and in possession of her protective reflexes. General anesthesia may then be induced.

Cardiac Disease.—The pregnant cardiac patient requires scrupulous care, especially at the time of delivery. Serious disease is found in approximately 2 per cent of clinic patients. Fundamental considerations are as follows: (1) Continuous pre-delivery evaluation with regard to the heart disease, including proper diagnosis, determination of changing reserve, and the severity of the disease. The pregnant patient with cardiac disease should be treated by a cardiologist and function should be brought to an optimal level. Anemia should be prevented or, if present, corrected, and chronic infections controlled. (2) In pregnancy, the heart is displaced upward by the elevated diaphragm so that at term its outline is transverse. There are physiologic alterations in heart sounds which should not be confused with the intrinsic disease. (3) The lungs are not compressed; there is lateral expansion and the vital capacity may be increased 5 per cent. Decrease in vital capacity

*Presented before the third general scientific session of the 93rd Annual Meeting of the West Virginia State Medical Association at The Greenbrier in White Sulphur Springs, August 27, 1960.

Submitted to the Publication Committee, September 6, 1960.

may indicate early decompensation. (4) Blood volume normally is increased by approximately 25 per cent near term, which represents an added cardiac work load. (5) Weight value is a reliable guide to occult edema. A weight gain of more than 15 pounds, which figure usually accounts for the combined weight of the infant, the placental products and the blood volume increase, may represent decompensation and, certainly, is an added burden.

Fluids and salt must be carefully restricted. Intravenous therapy or drugs given must be accurately recorded and, indeed, held to a minimum.

Decompensation is the dangerous complication and the one to be dealt with most frequently. During labor, pain must be controlled by safe measures. In the early phases, small (5-8 mg.) doses of morphine are valuable. This agent has a salutary effect on decompensation. Later in labor, intermittent nitrous oxide-oxygen (50-50) or trilene inhalation effectively relieves labor pains. Barbiturates in the presence of pain produce delirium and excitement, and must be avoided or, if used, combined with a narcotic.

In severe disease and when there is evidence of decompensation, the second stage of labor is best managed by continuous low spinal or caudal analgesia. The method will minimize the cardiac work by producing a bloodless phlebotomy and by reversing pulmonary edema. In addition, it usually shortens labor. These regional methods may be continued through the delivery period.

In patients not showing evidence of decompensation or those not having severe cardiac disease, the period of delivery may be handled by inhalation anesthesia. In rheumatic heart disease, cyclopropane is the preferred anesthetic.

Oxygen should be administered even when regional procedures are used. Bearing-down efforts should be discouraged. Oxytocics are dangerous and may not be advisable since the blood forced from the uterus into the circulation increases the circulating blood volume and thus may constitute an overload in some patients. In addition, there usually is an increased peripheral resistance and a raised blood pressure, which add to cardiac work. Most oxytocics also have a poor effect on coronary circulation.

The Diabetic Pregnant Patient.—Diabetes occasionally is encountered in the pregnant female; in this circumstance the stillbirth and neonatal death rates are high. Hydramnios and toxemia are frequent. Drugs which tend to promote acidosis or upset carbohydrate metabolism must be avoided. The infant usually is in a precarious state and transplacental narcosis should be avoided.

Type of Anesthesia.—Conduction block such as caudal, epidural or low spinal is preferred. By this means the infant is protected from systemic depressants.

Equally important is the need to avoid altering the maternal diabetic state.

Once delivery is accomplished, the anesthesiologist and the obstetrician must be alert to two problems: the increased insulin needs of the mother and the excess insulin levels in the baby. The rapidly rising need for insulin by the mother is due to deprivation of the protein hormone from the fetal sources. Insulin dosage should be increased and if unusual cardiovascular changes occur indicative of acidosis, insulin may be diluted in 500 ccs. of 10 per cent dextrose and given by slow intravenous infusion.

Careful observation of the infant also is necessary in order to detect at once the onset of endogenous insulin shock. Glucose supplements are necessary and may be given prophylactically to these infants in cases of severe maternal diabetes in which the mother's diabetic state has appreciably improved during pregnancy.

Toxemias of Pregnancy.—Normal pregnancy is characterized by a decreased ability to excrete sodium and eliminate water, especially in the last trimester. The condition is intensified in toxemia which, in its various forms, is accepted as being a biochemical disturbance. The administration of salt augments proteinuria, elevates blood pressure and promotes edema, while salt depleting measures ameliorate the signs and symptoms.

The occurrence of toxemia in the pregnant patient is a matter for grave concern because the disease carries a substantial maternal mortality rate and a high fetal mortality rate as well. In eclampsia, the maternal mortality depends on the time interval between the appearance of convulsive features and the delivery of the baby. If only one or two convulsions occur and delivery is accomplished in 2 hours, the mortality rate is approximately 7 per cent. If more than one or two convulsions occur, the rate is even higher. At the same time the fetal mortality rate averages 35 per cent.

Many factors are paramount in predisposing a female to toxemia. Among them are age, parity and various diseases. Toxemia is a disease of primiparity. Diabetes and existing hypertension aggravate the state.

Accumulation of intracellular sodium is the important lesion. It is probable that this and the

cellular edema in different organs produce dysfunction. Cerebral symptoms probably are on this basis (Dieckmann). In regard to elevated blood pressure, it has been reported that the renal arteries, both the intima and the media, have a 22 per cent higher water content and a 13 per cent higher sodium content than they do in normal subjects. Such swelling reduces renal blood flow.

Disturbances of body physiology are universal. The chief ones are outlined below:

Blood pressure over 200 mm. Hg.
Cerebral edema
Fever
Generalized edema
Globulinuria
Glomerulonephritis
Hepatitis
Hydramnios
Myocardial degeneration
Renal insufficiency

Eclampsia and preeclampsia are the chief toxemias of pregnancy. Preeclampsia occurs about once in every 20 deliveries while true eclampsia occurs about once in every 500 pregnancies. Both have a similar underlying cause, and difference is mainly in degree. The anesthetic management differs only slightly. To appreciate the situation the fundamentals of these "biochemical diseases" should be considered. Significant features are three: (1) the hypertension, (2) the renal dysfunction and (3) the convulsive tendency. It is a disease associated with metabolic disturbances and acid-base imbalance and especially associated with cerebral oxygen deprivation. Cellular oxygen utilization is compromised; cerebral blood flow is not affected but cerebrovascular resistance is greatly increased. The toxemias themselves may bring about cerebral depression, and there is about a 29 per cent net depression in cerebral oxygen consumption. A correlation between the cerebral metabolism and mental clearness is evident.

The use of barbiturates has been extensive and the practice must be questioned. These drugs do not correct the pathologic condition and may cause further deterioration in cerebral physiology. They may also superimpose a histotoxic effect on the disease. It is evident from various investigations that cerebral blood flow is reduced by the barbiturates and especially by thiopental. The cerebrovascular resistance is not altered by amobarbital nor by phenobarbital, and oxygen utilization is not markedly altered. Of these drugs, amobarbital thus probably is the preferred agent. In any event, the barbiturates seem to add to the post convulsive comatose state.

It now is commonly believed that related to the swelling of the tissues of the vascular tree there is a widespread spasm of the terminal arterioles throughout the entire body, especially marked in the kidney. On this basis, therapy and anesthesia must be directed toward avoidance of any increase in pressure and toward active combat with regard to the angiospastic mechanisms.

The choice of anesthesia is conduction block. Spinal analgesia is preferred since the total dose of local agent used is relatively small. Careful epidural or caudal analgesia, however, with attention to total dose, is safe. The effects are good anesthesia with amelioration of symptoms of the toxemia. Blood pressure is decreased, convulsions cease, headache is relieved and urine output is increased. Such conduction block can be used in the period prior to delivery for treatment.

Anesthetic agents which are known to produce metabolic upset and parenchymal damage of various organs (liver and kidney) should be avoided. Included in this class are ether, chloroform, vinyl ether, ethyl chloride and trilene.

When frank convulsions occur, sodium amytal is the indicated barbiturate for control. Muscle relaxants, however, combined with oxygen administration and assisted respiration by bag and mask are more effective and less deleterious.

Problems Related to Fetus Affecting Anesthetic Management

Premature Labor.—Prematurity occurs in approximately 3.2 per cent of hospital deliveries. It is a rather common problem. Depression of the fetus must be avoided. A premature fetus is especially susceptible to narcotics and barbiturates as well as to the general anesthetic agents. All these can cross the placenta and produce narcosis. Some form of regional analgesia is indicated.

Extrauterine Pregnancy.—One pregnancy in every 300 is extrauterine. Among the dangers to be considered are shock and hemorrhage. Since the operation usually is emergent, the problem of the full stomach must be handled.

Regional anesthesia, especially caudal and spinal, compromises cardiovascular hemostasis. Light general anesthesia is indicated and cyclopropane is the anesthetic of choice since it has a salutary effect on the circulation and helps prevent the development of shock. To protect against aspiration of a recent meal, a cuffed endotracheal tube is exceedingly helpful.

Table 2

PROBLEMS RELATED TO FETUS AFFECTING ANESTHETIC MANAGEMENT

1. Premature Labor
2. Extrauterine Pregnancy
3. Placenta Previa and Premature Separation

Placenta Previa and Premature Separation.—The incidence of placenta previa is about one in 500 cases and that of premature separation is about one in 300. In this condition of compromised circulation, the danger to the fetus is great from the hypoxia which occurs. Such a fetus must not be subjected to depressant drugs. Regional anesthesia is indicated and pudendal block is preferred if the situation is not critical, i. e., if bleeding is minimal and vaginal delivery is the obstetrical procedure. If massive hemorrhage occurs and cesarean section is performed, light general anesthesia with cyclopropane is indicated. A relaxant may be included if necessary.

Problems of an Obstetrical Nature as Hazards In Anesthetic Management

Abnormalities of Position.—Certain presentations of the fetus require special anesthetic attention. The chief abnormality met with is breech presentation, which occurs in about 4 per cent of deliveries. Obstetrical management of the frank breech encompasses intrauterine manipulation which calls for uterine muscle relaxation. Deep ether anesthesia is used but more effective is deep chloroform anesthesia, which is our preference. Fluothane, which does decrease uterine muscle tone extensively, has not been fully evaluated. Regional analgesia, either caudal or low spinal, actually is inadvisable since the parasympathetic blockade and sympathetic dominance may obstruct uterine manipulation by promoting uterine tone.

When a full breech is converted, anesthesia is greatly lightened and for perineal relaxation a relaxant agent is employed.

In the footling presentation, the chief obstetrical need is perineal relaxation, and low spinal or epidural anesthesia is indicated.

Table 3

PROBLEMS OF AN OBSTETRICAL NATURE AS HAZARDS IN ANESTHETIC MANAGEMENT

1. Abnormalities of Position
2. Oxytocic Incompatibility
3. Amniotic Fluid Embolism

Occiput posterior position represents about 20 per cent of vertex presentations. Persistent occiput posterior, however, is much less frequent and may be handled in two ways: (1) If the head is on the perineum, the obstetrician may perform a Scanzoni maneuver. This requires perineal relaxation, best provided by low spinal anesthesia. (2) If the head is high in the birth canal, the obstetrician may perform manual rotation. This requires uterine muscle relaxation, best provided by deep general anesthesia.

Delivery of Twins.—Critical considerations in the anesthetic management of delivery of twins are the frequency of prematurity and the greater risks to the second born twin. More than half the infants are premature. In general, the mortality rate is three times higher for twins than for the single birth, and the rate for the second twin much higher than that for the first.

Effects of anesthetics on the second twin have been studied. The signs of depression are least when pudendal block or nitrous oxide anesthesia is used. In Little's experience, epidural caudal anesthesia was associated with the highest mortality rate but this well may be due to the selection of caudal anesthesia for the poor situation. When cyclopropane is used the risk to the second child is proportional to the duration of anesthesia; after 10 minutes, fetal death and marked depression are common.

The following anesthetic management is recommended for delivery of twins:

1. Local infiltration or pudendal block.

2. If operative measures, i. e., version and extraction, are required for the second twin, either chloroform or fluothane anesthesia is indicated. Cyclopropane is not desirable here.

Oxytocic Incompatibility.—All the available oxytocics including the pituitary and the ergot derivatives have a vasopressor effect, especially when administered intravenously.

A number of pharmacologic considerations are fundamental to the choosing and safe use of an oxytocic.

1. Crude pituitrin (posterior pituitary extract) can produce a shock-like state because of the presence of the pressor factor (Eastman) which has a coronary constrictor effect as well as strong peripheral vasoconstrictor action on capillaries and arterioles. Pitocin also occasionally can produce hypotension through this mechanism.

2. Pitocin. This purified fraction of pituitrin contains one unit of pressor factor for every ten units of oxytocic activity and this, though small, is capable of evoking an increase in blood pressure.

3. The ergot derivatives, Ergonovine and Methergine, have pressor action.

4. In order of pressor strength, the various oxytocics may be listed as Pitocin→Ergonovine→

Methergine. The degree of pressure rise and the incidence of pressor effect are least with Methergine.

5. Synergism between oxytocics and other vasopressors, such as ephedrine, has been established. Melville has proved the strong effects of pituitrin plus ephedrine, even in half their usual doses. Other combinations showing enhanced pressor action over that of either drug individually include Pitocin and ephedrine, Pitocin and Ergonovine (Carvalho) and Ergonovine and ephedrine (Greene).

McGinty states that since each of the pure oxytocics has some pressor action (not significant when the drug is administered alone), administration of combinations of the oxytocics is dangerous.

6. Vasopressors are used during spinal and regional anesthesia to prevent hypotension. Care must be exercised in obstetrical patients who may receive an oxytocic. It is recommended that the vasopressor dose be reduced.

A report by Moore indicates that the combination of most oxytocic drugs with a vasopressor agent will produce hypertension in 4.6 per cent of postpartum patients. The degree of rise is out of proportion to the additive pressor effects of each.

7. Pressor effects of intravenous oxytocics usually resolve within one hour.

8. Synthetic oxytocin (Syntocin). Du Vigneaud, in 1949, isolated oxytocin in pure form, and the structure was established as a cyclic octa-peptide. In 1954, oxytocin was synthesized and for this Du Vigneaud received the Nobel prize.

Laboratory studies by Morris on the injection of synthetic oxytocin (Syntocin) during the administration of various anesthetic agents reveals that this agent is compatible with cyclopropane, trichlorethylene and barbiturate anesthesia. It appears to be free of a pressor factor and actually to reduce myocardial irritability. Clinical studies by Stone reveal incompatibility of Syntocin with vasopressors or cyclopropane as minimal or none.

Complications have been reported due to the pressor effects of oxytocics and to their combination with regular vasopressors. Hypertension has been aggravated. Cerebrovascular accidents have been reported. Severe headache, convulsions and hemiplegia may be induced by the administration of oxytocics during spinal or caudal anesthesia when this form of anesthesia has been accompanied by the administration of neosynephrine or ephedrine (Greene).

Authoritative reports and experience demonstrate the incompatibility of Pitocin and even of Ergonovine with cyclopropane anesthesia. Severe hypotensive episodes occur. Fatalities have followed the combination of various oxytocics and cyclopropane. The mechanism may be a synergistic constriction of coronary arteries.

Amniotic Fluid Embolism.—The sudden presence and characteristic symptoms of amniotic fluid embolism render it a dramatic complication of delivery. It should be distinguished from anesthetic accidents.

Occurrence.—The condition is rare, most frequently seen in white multipara in the age span of 35-45 years. It occurs toward the end of the first stage of labor after a stormy and rapid labor. Oxytocics have usually been given.

Pathology—Amniotic fluid enters the maternal circulation following rupture of the fetal membranes. The fluid usually dissects between the membranes and uterine wall to reach the placental margin and there enters the venous sinusoids. This process is enhanced by a number of circumstances: strong uterine contractions which seem to act like a sucking force; processes which open the sinuses and vessels such as cesarean section, marginal separation of placenta and rupture of uterus. Another path for the amniotic fluid is through the endometrial vessels following laceration of the cervix during normal labor.

Mechanism.—Two theories have been proposed to explain the reaction when amniotic fluid enters the systemic circulation. In the original theory it was considered that the amniotic fluid was deposited in the pulmonary arterioles. This produced a state of anaphylactoid shock. Experimentally, various particulate material when injected into the circulation produces clinical symptoms of vascular collapse and changes in blood coagulability (Steiner).

Another concept is that the picture is produced by initial widespread rapid intravascular clotting with subsequent defibrination of blood. Amniotic fluid has been shown to contain large amounts of thromboplastin. After extensive intravascular clotting a state of afibrinogenemia occurs which leads to hemorrhage and death.

Clinical Picture.—Pulmonary symptoms and circulatory shock characterize the condition. Sudden respiratory difficulty or apnea accompanied by disproportionate cyanosis, circulatory collapse, pulmonary edema, and cardiac arrest, with death, is typical. If the patient survives the immediate episode, there remains uterine atony along with postpartum hemorrhage, which is difficult to control.

Treatment.—If patient survives the initial episode unfaltering support of respiration and circulation is called for. Adequate airway, oxygenation and fresh whole blood plus vasopressors are basic. Administration of fibrinogen preparation must not be delayed. The amount required usually is 8-12 Gm. or the equivalent of that amount in the circulating blood.

Comment.—Amniotic fluid embolism carries a high mortality rate. Prognosis depends on extent of intravascular clotting. If the patient survives this period she still may succumb to uncontrollable hemorrhage.

References

1. Little, D. M. & Bannister, W. K.: Choice of Anesthetic Technique in Complications of Pregnancy and Labor, J. A. M. A. 171:1465 (Nov. 14) 1959.
2. Merrill, R. B. & Hingson, R. A.: Study of Incidence of Maternal Mortality from Aspiration of Vomitus During Anesthesia, Anesth. & Analg. 30:239 (July-Aug.) 1951.
3. Lock, F. R. & Mason, L. B.: Obstetric Deaths Related to Anesthesia, New Orleans M. & S. J. 102:449 (March) 1950.
4. Mendelson, C. L.: Aspiration of Stomach Contents into Lungs During Obstetric Anesthesia, Am. J. Obst. & Gynec. 52:191 (Aug.) 1956.
5. La Salvia, L. A. & Steffen, E. A.: Delayed Gastric Emptying Time in Labor, Am. J. Obst. & Gynec. 59:1075 (May) 1950.
6. McNeal, A.: Problems for Anesthetist When Extreme Relaxation is Needed for Patient with Toxemia of Pregnancy, Anesthesiol. 11:96 (Jan.) 1950.
7. Assali, N. S.: Measurement of Uterine Blood Flow and Uterine Metabolism. I. Critical Review of Methods. Am. J. Obst. & Gynec. 66:3-10.
8. Ibid.: Measurement of Uterine Blood Flow and Uterine Metabolism. II. The Techniques. Am. J. Obst. & Gynec. 66:11.
9. McCall, M. L.: Cerebral Circulation and Metabolism in Toxemia of Pregnancy. Observations on the Effects of Veratrum Viride and Apresoline. Am. J. Obst. & Gynec. 66:1015 (Nov.) 1953.
10. Hingson, R. A.: Treatment of Eclampsia. (Editorial). Obst. & Gynecolog. Survey 4:350, 1949.
11. McCall, J.: Barbiturates in the Toxemias of Pregnancy, J. A. M. A. 149:51 (May 3) 1952.
12. Macy, I. G.: Metabolic and Biochemical Changes in Normal Pregnancy, J. A. M. A. 168:2263 (Dec. 27) 1958.
13. Lund, P. C.: The Role of Conduction Anesthesia in the Management of Eclampsia, Anesthesiol. 12:693 (Nov.) 1951.
14. Mengert, W. F. and others: Physiopathology of Eclampsia, Am. J. Obst. & Gynec. 57:97 (Jan.) 1949.
15. Little, W. A. & Friedman, E. A.: Anesthesia for the Twin Delivery, Anesthesiol. 19:515, 1958.
16. McGinty, L. B.: A Study of the Vasopressor Effects of Oxytocics When Used Intravenously in the Third Stage of Labor, West. J. Surg. 64:22 (Jan.) 1956.
17. Carvalho, M. A., Ahearn, R. E., Watrous, J. B. & Rienzo, J. S.: Am. J. Obst. & Gynec. 65:282, 1953.
18. Greene, B. & Barchman, J.: Cerebral Complications Resulting from Hypertension Caused by Vasopressor Drugs in Obstetrics, New York State J. Med. 49:1424 (June 15) 1949.
19. Belinkoff, S.: Cyclopropane Pituitrin Incompatibility, Am. J. Obst. & Gynec. 48:109, 1944.
20. Newsletter, Am. Soc. Anesthesiol. 12:30 (April) 1948.
21. Kanter, A. E. & Klawans, A. H.: Shock from Posterior Pituitary Extract, Am. J. Obst. & Gynec. 56:366, 1948.
22. Marmer, M. J., Barland, S. & Sacca, J.: Cardiac Arrest Due to the Use of Pituitrin Following Normal Delivery, Am. J. Obst. & Gynec. 64:686 (Sept.) 1952.
23. Casady, G. N., Moore, D. C. & Bridenbaugh, L. D.: Postpartum Hypertension After Use of a Synthetic Oxytocic with Anesthesia in Dogs, Anesthesiol. 19:787 (Nov.-Dec.) 1958.
24. Duner, H., Granath, A. & Klingen Stron, P.: The Effect of Ergotamines on Blood Pressure and Cardiac Output During Spinal Anesthesia in Man, Acta. Anaesth. Scandinav. 4:5, 1960.
25. Steiner, F. & Lushbaugh, G.: Amniotic Fluid Embolism, J. A. M. A. 117:1245, 1941.
26. Reid, D. E., Weiner, A. E. & Roby, C. C.: Intravascular Clotting and Afibrinogenemia: The Presumptive Factor in the Syndrome of Amniotic Fluid Embolism, Am. J. Obst. & Gynec. 66:465, 1953.
27. Scofield, G. F. & Beard, J. B.: Fatal Embolism by Amniotic Fluid in the Lungs, Am. J. Clin. Path. 28:400 (Oct.) 1957.

Role of the Team Physician

The interested team physician can do much to protect the high school athlete. He becomes an expert in this special field of accident prevention. Beyond this primary duty he plays a role in a worthwhile educational effort which, if properly oriented, is a wholesome and memorable part of student life. Its benefits are not confined solely to a limited and talented few. Competitive athletic teams should be organized, however, in more than just so-called "major" sports and should be well coordinated with an active intramural program designed to promote greater interest and physical fitness of the entire student body.

The monetary gain of the team physician does not compensate for the time and effort expended in doing a good job. Adequate return, however, is received through one's efforts in assuring the young athlete a "fair shake" and in a truly satisfying experience.—William J. Farley, M. D., in Journal, Medical Society of New Jersey.

Torsional Deformities of the Lower Extremities*

J. H. Kite, M. D.

THE general practitioner, the pediatrician and the orthopedist may be consulted when the parents of the young child are worried about his toeing in or out. This is a minor problem for the doctor, but for the young couple criticized by relatives, it is one of major proportions.

In the medical world, many of our major problems are being solved. This is especially true with regard to orthopedics. We are now having to treat more of the simpler conditions. A generation ago at the Scottish Rite Hospital for Crippled Children, one-fourth the total number of beds were occupied by children suffering from osteomyelitis. Today, with the antibiotics, the general practitioner and the pediatrician are controlling the infection before the organism reaches the bone. Another fourth of the hospital beds were occupied by bone and joint tuberculosis patients. While tuberculosis occurred in only 4 per cent of our admissions, the long period required for treatment kept many beds filled. Now we seldom see a case of bone and joint tuberculosis. Poliomyelitis filled another fourth of the beds. These cases too are becoming rare.

Thus, in our clinics and in our offices we are seeing more of the minor ailments today than we have seen in the past. We should have a definite answer for the parents and neither overtreat nor undertreat these children with minor compaints. It is one of the latter, namely, torsion of the legs in young children, that I shall bring to your attention today.

In my student days we were told that bowleg and knock knee were due to rickets, and that we should give the child more cod liver oil. When

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Submitted to the Publication Committee, August 27, 1960.

Figure 1-A

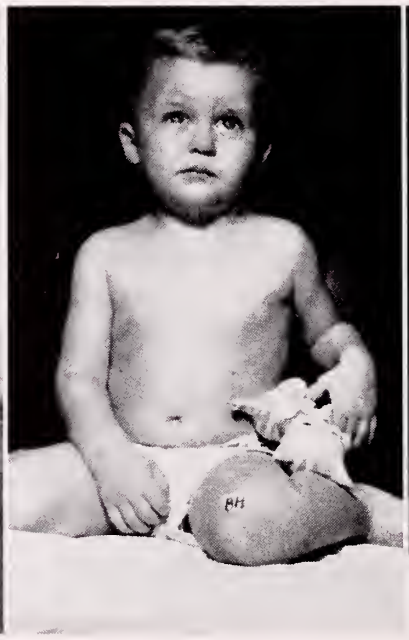

Figure 1-B

Figure 1-C

Figure 1-A. Boy 21 months old walks pigeon toed, stumbles over his feet when he runs and falls frequently. The left foot turns in more than the right. (B) He sits between his feet. His knees are flexed and his feet folded back opposite each hip. This rolls each leg medially ninety degrees at the hip. The anterior surface of the thighs face each other. (C) He also sits on his feet, with one or both turned in under him. With the knees flexed, this position puts a ninety degree twist in the lower leg between the knee and the foot.

the x-ray failed to show the rickets, we assumed that the cod liver oil he had already received had cured him of the disease. Nowadays I wonder if any of the cases of bowleg and knock knee are due to rickets, except those few rare cases of vitamin D—resistant rickets.

Let us look at two patients who might be brought into your office any day.

Patient No. 1.—The mother of the child says that her boy is pigeon toed, that he trips on his feet when he runs, and that he falls frequently (Figure 1-A). She says that he toes in worse on the left foot. My practice is to let the child go into the next room and play at a toy table while I talk to the mother. I tell the mother that most pigeon toed children sit between their feet and on their feet. She says that he never sits, that he is always on the go.

Observation

We look through the open door and he is sitting on the floor at the toy table with his knees flexed and his feet folded back opposite each hip. He is sitting between his feet (Figure 1-B). She insists that she has never seen him sit this way before. I show her how sitting in this position rolls the legs medially ninety degrees at the hips. In this position the anterior surface of each thigh faces medially.

The boy then sees another toy he likes, and he comes up on his knees to get it and sits back on his feet with the feet turned in under him (Figure 1-C). He seems quite comfortable in this position and continues to play sitting on his feet.

Figure 2-A Figure 2-B

Figure 2-A. In order to detect rotation at the hips, the legs are turned in and out as far as they will go. When the child has been sitting between his feet, the legs can be rotated medially until the patellas face each other. (B) The legs cannot be rolled laterally past mid-position to any great extent.

Examination

We now examine the boy by doing what I have been calling the "rotation test." With the child sitting in his mother's lap or lying on the examining table, the feet are grasped and the legs are rotated in and out at the hips (Figure 2-A). The legs can be turned in until the anterior surfaces of the thighs face each other and until the patellas point toward each other. When we try to turn the legs outward they can be turned only a little way past midposition (Figure 2-B). We can say from this test that he has medial torsion in the hips.

The second test is done by letting the child sit on the edge of the table with the knees flexed and the legs dangling (Figures 3-A and 3-B). Normally the feet point straight forward

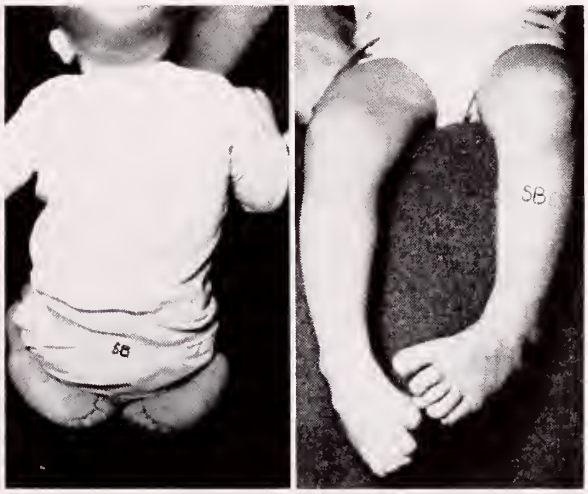

Figure 3-A Figure 3-B

Figure 3-A. When the child sits with his knee flexed and his feet folded back under him, he puts a medial twist in the lower leg between the knee and the foot. (B) When he sits with the feet hanging down, they do not point straight forward in the normal manner, but point medially.

but this boy's feet point in toward each other thirty or forty degrees. We can say that he has also acquired medial torsion between the knee and the foot.

We next examine the foot. He has a good arch. The imprint shows that he has borne weight on the heel and along the lateral side of the sole and on the ball of the foot, but that the arch is clean. He bent the forefoot into an adducted position when he sat on it, so has no flatfoot. The heels are straight under the midline of the tibias.

The mother now calls attention to the two "ugly knots" on the lateral side of each foot (Figure 4). One of these is over the head of the talus, the other over the anterolateral corner of the calcaneus. When the child sits on his foot, these are the two bony prominences which rest

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retains

extra
antibiotic
activity

DEC

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sustains activity levels evenly

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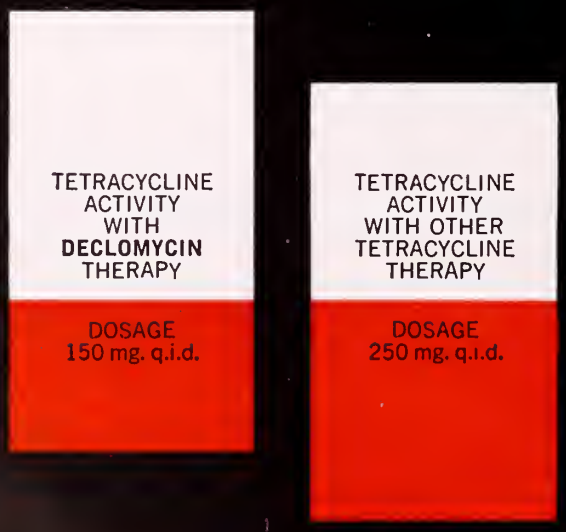

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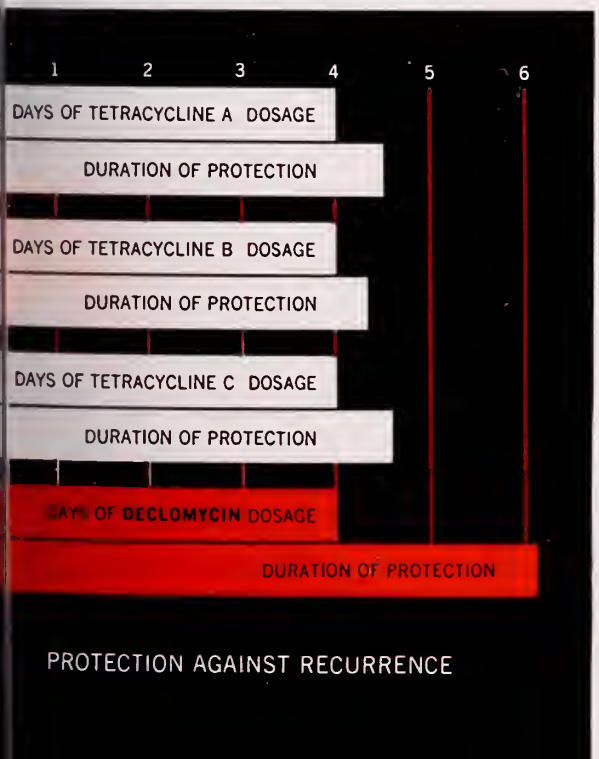

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PEDIATRIC DROPS, 60 mg./cc. in 10 cc. bottle with calibrated, plastic dropper. **Dosage:** 1 to 2 drops (3 to 6 mg.) per pound body weight per day—divided into 4 doses.

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on the floor. If the child is several years old, the skin will be calloused and discolored at these two points, and the bones may be slightly enlarged. We explain to the mother that they are like bunions and have developed from pressure. Just as a bunion develops when a lady wears a tight shoe, so do they develop in these children from the pressure of sitting on their feet. These prominences usually are a little more noticeable on the left foot. The child sits more often on the left foot than on the right. I know of no explanation for this.

Bowleg: Apparent vs. Real

At this time in the examination, the mother will say that the neighbors have been telling her the boy is bowlegged. He is, in fact, a little bowlegged but this is more apparent than real.

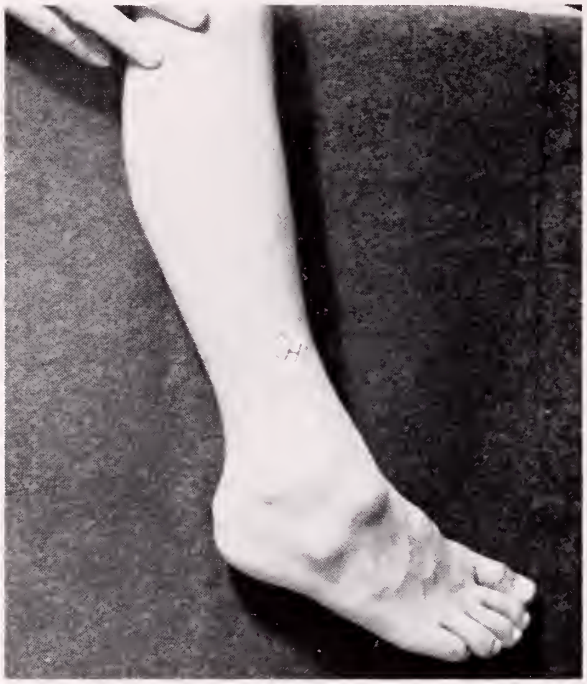

Figure 4

Figure 4. When the child has been sitting on his feet for a long time two "knots" will develop on the side of each foot, one over the head of the talus, the other over the anterolateral corner of the calcaneus. They result from pressure, and the skin becomes discolored and calloused.

These children usually walk pigeon toed but will stand with their feet straight forward and, when they do this, it does appear that they are bowlegged. To examine the bowleg deformity, let the child sit and bring his legs together with the feet touching. He now looks bowlegged. The knees may be two fingerbreadths apart. If we look more carefully at the legs we notice that the patellas are pointing laterally, and that we are looking obliquely at the legs, and that the medial side of each is facing forward (Figure 5-A). We now roll the legs medially until the patellas point straight forward as they do in walking. This makes the feet turn in toward each other in the pigeon toed position. Now we notice that the knees are closer together than the ankles and that he is a little knock kneed as he should be at this age (Figure 5-B).

In some of these children there is more lateral convexity to the lower leg between the knee and ankle than there is in the child without torsional deformity. This does make him appear somewhat bowlegged. The x-ray shows that the shafts of the tibia and fibula are straight, but the soft parts apparently curved (Figure 6). The curve is due to a tilting of the epiphysis at each end of the tibia. This lateral bowing is made worse by the way the leg is bent when he puts his foot back by his hip.

Treatment

Part of the treatment is obvious. The first thing to do is to break the child of the habit of sitting between the feet and on the feet. This is extremely difficult. Before birth he was floating in amniotic fluid. After birth he was placed on a firm mattress. He was not comfortable. The nurse turned him into the fetal position and he doubled his knees up under him and went to sleep. This knee-chest position soon became his position of comfort and he continued to sleep this way. When he was old enough to sit, he would sit back on his feet and rock, with his feet still turned in under him.

The mother will have to remind this boy many times a day to get off of his feet, and to put them out in front of him. She should try to teach him to sit tailor fashion, which will roll his legs outward at the hips. He is not comfortable in this position because the legs will not turn out enough in the hips. Sometimes the mother can place a bracelet with large links about the ankle, and when he sits on this it will be uncomfortable and will remind him to get off of his feet.

If the baby is quite small and is not turning over yet, he should be placed on his side with his knees slightly flexed. He will not like this position because it is new, and because it makes him feel insecure. A pillow may be placed against his back or, still better, a baby blanket may be rolled up like a log and placed against his back. This will make him feel more secure. When he is on his side the anterior surface of both the lower leg and the upper leg are in the same plane as the body, and the legs are not rolled in or out. The small baby who cannot turn over should not be placed on his back, especially after feeding, because babies have regurgitated and have drowned in this position. The baby is safe on his side or stomach.

For the year-old child with medial rotation in the hips, we have the mother grasp the legs at the knees and rotate the legs outward. She can do this facing the baby with the baby lying on the bed or, with the baby sitting in her lap, she can reach around the body and grasp each knee and roll the legs outward. She is instructed to

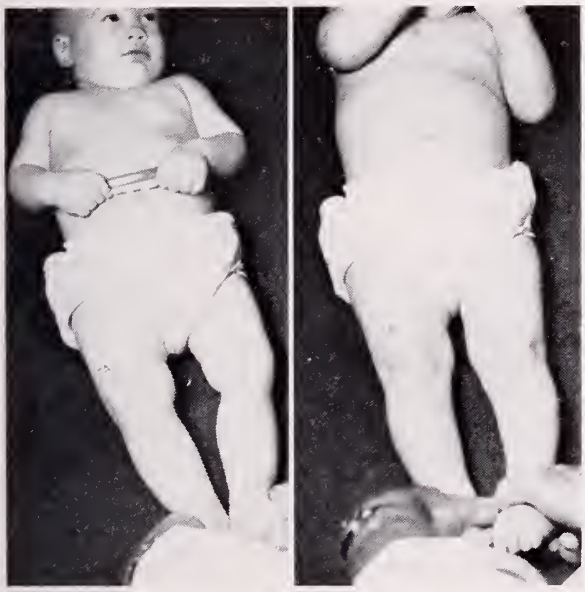

Figure 5-A Figure 5-B

Figure 5-A. The child with medial torsion between the knee and the foot appears bowlegged when he stands with the toes pointing straight forward. This is because we are looking obliquely at the legs and seeing the medial side of each. (B) When the legs are turned medially at the hips until the patellas point forward as they do in walking, the toes will point medially. In this position the knees will be closer together than the ankles and there is slight knock knee, as there should be at this age.

hold the legs in this position for half a minute, then relax them, then repeat the maneuver. She should do this for five minutes twice a day.

To correct the medial torsion between the knee and foot, we have the mother hold the knee straight with the patella pointing forward and, with the other hand on the medial side of the foot, grasp the foot and rotate it outward, as she would do in wringing clothes. She should hold this for a half-minute and release it, and rest herself and the child for a second, then repeat.

For the child who has more of a lateral convexity of the lower leg than normal, we let the mother stand on the side of the child and grasp the knee and ankle and place her thumbs on the lateral side of the leg over the fibula, and strain the foot outward as in straightening a bent wire. She should hold this for about half a minute and release the leg and repeat the exercise.

The mother is not shown all three of these maneuvers on the first visit. She is shown how to do the one most needed, usually the correction of the medial torsion in the hips. She is shown others later, if needed.

It is true that nature assists in correcting deformities, but we may err if we promise the parents that the deformities will correct themselves. No harm can be done by untwisting a twist the child has placed in the leg by constantly sitting in the same position.

The treatment described will correct most cases. If the mother does not carry out the exercises, we let the child wear a bar across the shoes at night to turn the feet out. This corrects chiefly the medial torsion in the hips. I have had no success with the "twisters" to be worn during the day, as recommended by some practitioners.

There are a few children who have marked medial torsion of the legs at birth, and this is more difficult to correct. These patients should be given the exercises described, and if the deformity has not been corrected by the time they are eighteen to twenty-four months old, they should have double leg braces. These will correct the deformity in four to six months, depending upon its severity and the age at which the braces are applied.

The success of the method of treatment outlined depends largely on the enthusiasm of the

Figure 6

Figure 6. X-rays show the shafts of the tibia and fibula to be straight, but show a lateral convexity of the soft parts. The legs are curved because of the tilt that takes place at the epiphyseal line at each end of the knee.

doctor and the patience with which he explains it to the mother, also on how well he teaches her to apply it.

Lateral Rotation and Bilateral Flatfoot

Patient No. 2.—Now let us look at the second patient. The mother says she is worried because her boy has flatfoot and walks with his feet turned out. He is wearing some flimsy oxfords which he is breaking down in the arch. His heels turn out in valgus position. When he walks barefoot, the longitudinal arch is obliterated and the feet bulge along the medial border; the imprint of each is that of flatfoot.

When we do the rotation test, the legs can be rolled out at the hips almost ninety degrees, but they cannot be turned in much past the midline. When the boy sits at the toy table he sits flat on the floor and crosses his legs in front of him tailor fashion. When he sits in a chair he sits with one foot under him, with the leg rolled out.

The mother states that when she brought the baby home from the hospital he slept on his stomach, with his legs spread out in frog position. He still sleeps that way. Why does he do this? Immediately after birth a stiff, new diaper, much too large for him, was applied and this held his legs in abduction, much like a Freijka pillow used for dislocated hip, forcing the hips in full ninety degree outward rotation (Figures 7-A and 7-B).

Figure 7-A

Figure 7-B

Figure 7-A. When the baby sleeps in frog position, the legs are rotated outward at the hips and after a while the muscles and ligaments become fixed in this position. The foot is pulled out and up, in the flatfoot position. (B) When the patient begins to pull up and stand, the legs are in outwardly rotated position; the feet are flat.

In this position the great toe rests on the mattress, so the baby could not adduct the foot. The only way the foot was free to move was in abduction and eversion. The peroneii are able to function, and they pull the foot out and up into a calcaneovalgus position. After a while the peroneii become shortened, and the tibials become stretched. Physiologically, the muscles in a shortened position gain in strength, while those that are stretched lose strength somewhat. Mechanically, the tibials are working at a disadvantage because they are pulling from around the corner, while the peroneii are working at an advantage because they are pulling in a straight line. The foot very soon, then, begins to function as a flatfoot.

Treatment

The first thing to do is to break the baby of the habit of always sleeping in the same position. If he doubles his knees up under him part of the time, there will be no fixed deformity. It is best to try to get him to sleep on his side part of the time. The mother can grasp the knees and roll the legs medially. If the baby is not walking yet, this exercise alone is shown the mother on the first visit. If the baby is walking flatfoot, the mother is shown how to turn the foot down and in, to correct deformity (Figure 8).

With the baby lying on his back, she places her index finger on the tubercle of the navicular. This is described to the mother as the small, pea-shaped bone halfway between the base of the great toe and the heel, and she can be sure of the bone by moving the finger back and forth from toe to heel, and can tell when she is on the prominence. With the mother's index finger on this bone, the fore part of the baby's foot rests on her flexed middle finger, and her thumb is placed on the great toe. This gives her a good grip on the fore part of the foot. The heel is grasped by her other hand and the third finger of this hand presses on top of the index finger of the first hand. Both the fore part of the foot and the heel are pressed inward toward the other foot, while pressure is made outward on the middle of the foot. Care is taken to invert the heel. The foot is held in this position for half a minute and released and then stretched again. Each foot should be stretched for five minutes twice a day.

Shoe Correction

When the child is old enough to walk he is fitted with swung-in shoes with a Thomas heel. Nearly every large shoe company makes such a shoe. The fore part of the shoe is swung in more than with the normal shoe; the Thomas heel extends forward under the arch for a distance greater than that of the heel of the normal shoe, and is raised one-eighth of an inch. The counter is brought forward to give better support under the arch. A light shoe with mild alterations is used at first. Later a heavier shoe may be needed. If the foot still is flat, a "cookie" might

be inserted inside the shoe under the arch. A metal arch support may be used if available. I object very much to the placing of a wedge of leather under the little-toe-side of the sole. This tends to throw the foot over into flatfoot position.

An error often is made in treating flatfoot when a corrective shoe is used without first correcting the outward rotation of the entire leg. If the mother does not stretch the legs medially, the outward rotation usually can be corrected in a few months' time by letting the child sleep with a bar across the shoes at night, to rotate the legs medially.

Figure 8

Figure 8. Flatfoot deformity is corrected by holding the fore part of the foot and the heel turned in toward the midline of the body, with pressure on the middle of the foot, toward the lateral plane.

Knock Knee

Frequently children are brought in, with the only complaint being knock knee. A generation ago, children in such cases were at times subjected to high tibial osteotomy to correct the deformity. This seemed a radical procedure to me, even though a successful one. For a while I used knock knee braces. It was then noticed that most of the one-year-old and two-year-old children were knock kneed and that the children aged about five and six years were not. After making a series of photographs yearly in some very bad cases of knock knee, we were able to show that most of the knock knee deformities had become corrected spontaneously by the time the child was six or seven. A little remaining knock knee deformity is not unsightly and even may be desirable.

Time does not permit description of all variants in these cases. There is a type of flatfoot associated with medial torsion. The child acquires it by sitting between his feet with the feet turned outward. We have also congenital flatfoot, which is almost the reverse of clubfoot, and which requires casts for correction. Flatfoot with a vertical talus requires surgical treatment. So may spastic flatfoot. In some cases the Achilles tendon will have to be lengthened. These things, however, are problems for the orthopedist and will not be discussed here.

Summary

Torsion of the legs in children is a minor condition, and one that can be helped by treatment. It is wrong to tell the parents that flatfoot and torsion of the legs will correct themselves, and it is equally wrong to tell them that nothing at all can be done. Except in a few rare cases, both medial and lateral torsion are acquired, and it is my belief that in many cases flatfoot also is acquired. These conditions can be corrected by exercises which reverse the forces producing them. Braces and corrective shoes are needed in selected cases.

The Doctor: A Description

What is the doctor? He is a man who spent the first 30 years of his life achieving his education and qualification. He may be 40 before he really begins to earn a living. He has sacrificed early marriage, children, frequently his health, to engage in a profession which yields great incomes to a few, but to most, less than is earned by men who began working in trades at 20. He is a man subject to more social control by legislation, medical organizations, insurance organizations, hospitals, welfare groups and public opinion than a man or woman engaged in any other profession.

All sorts of money has been spent for public relations to show people this true image. Yet the doctor himself knows that the only image that really means anything to him is the image held by his own patients.—Morris Fishbein in Medical World News.

Inhalant Respiratory Allergy with Negative Cutaneous Reactions: Diagnosis and Treatment*

M. Murray Peshkin, M. D.

It is generally conceded that negative cutaneous reactions to foods in persons of all ages with allergic symptoms to such foods occur in an appreciable percentage of cases. Such general acceptance or recognition, however, cannot be claimed for another group of patients with inhalant respiratory allergy, especially those with typical seasonally recurring pollen allergy with negative cutaneous reactions to pollens. As a matter of fact, the literature contains scant reference to it when one considers the plethora of reports on inhalant respiratory allergy already published. Some workers even state it is difficult to understand why the skin and mucous membranes can remain negative to the highest concentrations of a solution of pollen or to dry pollen in a patient with symptoms of pollen intolerance. Again, it is common knowledge that many workers consider a patient clinically insensitive to pollen if the skin test is negative to pollen, especially with the intradermal techniques.

The diagnosis and management of patients with allergic symptoms to pollens and with negative skin tests are of clinical and extreme practical importance because, invariably, for the patient in this category who is treated with pollen extracts with average top doses as employed for the positive cutaneously reacting patient, there is no relief of symptoms. These findings apply equally to the patient with respiratory allergy symptoms and negative skin tests to nonpollen inhalant allergens.

Diagnosis

Pollen Allergy.—The diagnosis of inhalant allergy due to pollen with negative cutaneous tests is relatively simple.

Of clinical significance is the observation that patients with pollen allergy and negative skin tests to pollens are invariably pollen asthmatics. Approximately 98 per cent of these patients are negative reactors with the scratch test and 93 per cent are negative reactors with the intradermal test. These negative reactors have pollen asthma with or without hay fever. The remaining respective 2 and 7 per cent of this group of patients have hay fever only. In other words, practically all patients with hay fever only, show positive reactions to pollen with the scratch.

Kahn,[2] in 1926, independently of our observations[3] stressed the importance of recognizing that pollen allergy does occur despite negative skin tests with the scratch and intradermal techniques. The history of recurrent symptoms of pollen allergy is the most important criterion for making the diagnosis of pollen intolerance. In this connection we may ask: Of what immediate diagnostic value is a positive skin test to pollens without a positive history of respiratory allergy symptoms to pollens? Thus, the history of active clinical symptoms to pollens and, for that matter, to any inhalant allergen, rationalizes and even dictates therapy.

It is in order to restate that in the absence of other allergenic factors the most important single diagnostic criterion of clinical sensitization to pollen is the history of pollen asthma with or without hay fever or hay fever alone.

To confirm the diagnosis of pollen allergy with negative skin tests to pollens (referred to as skin refractory sensitivity or skin-test negative reactor), the dry pollen eye test was employed. This test was introduced in 1926[3] and described in detail in 1931.[4] The test is performed with natural dry pollen.

The incidence of negative skin tests to pollen in all children with respiratory pollen allergy is about 15 per cent and in adults it is even higher;[5] Kahn[6] found the incidence for all ages to range between 13 per cent and 15 per cent.

In the early days we interpreted a negative dry pollen eye test to mean that such a patient was not a pollen case even though the history of pollen intolerance was positive. This concept

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had to be revised not only because experience proved that specific pollen therapy was highly successful in patients with skin refractory sensitivity and positive pollen eye tests but also because subsequent studies revealed that about 2 per cent of all patients with pollen skin refractory sensitivity proved negative to the dry pollen eye test. This group of patients responded to specific pollen therapy equally as well as the remaining 98 per cent with pollen negative skin and positive eye tests.

The use of the strongest available solution of pollen for eye tests when the scratch and intradermal tests are negative will also result in a negative reaction. This finding is predictable because it has been shown that the intradermal test for a given solution of pollen or other allergen is a more sensitive test than the eye test with the same solution.[7] In other words, if a 10 per cent solution of pollen proved negative with the intradermal test, the same solution would prove negative with the eye test also. In this instance, a much higher concentration of pollen solution would be required to elicit a positive reaction with the eye technique of testing. Since such a preparation is not truly available, the natural dry pollen eye test proved sufficiently stronger to elicit a positive reaction in 98 per cent of cases.

The pollens and the methods of testing patients with a positive history of pollinosis are as follows: The tests are first performed by the scratch technique with a dry natural pollen or a 1-10 or 1-50 solution of pollen (experience has shown neither concentration to make any appreciable difference in the result of the test reaction). With a negative scratch test it is advisable and safest to do the dry pollen eye test. Such a procedure will eliminate the danger of a possible systemic reaction following the intradermal test with a 1-50 solution of pollen. The latter test can be employed with safety when the scratch test to that solution is truly negative. If, however, the scratch test is recorded as negative because of some technical or other reason when, in reality, the patient is a truly positive reactor, it is easy then to understand how a systemic reaction can be avoided if an eye test rather than an intradermal test were to follow a false negative scratch reaction.

A four-plus eye reaction to pollen (which causes chemosis of the sclera and conjunctival mucous membranes) never caused a systemic reaction. Such an eye reaction to pollen calls for repetition of the pollen scratch test. If the latter test again proves negative the intradermal test can be performed for academic reasons only. Never do a dry pollen eye test when the scratch test is positive. Recall that a positive dry pollen eye test merely confirms and does not establish the diagnosis of pollen intolerance. It may be recalled also that no matter how extraordinarily potent an allergen may be, pollinosis with negative skin and even eye reactions occurs and is a true clinical entity. For these reasons the diagnosis of this clinical entity is based entirely on the seasonal recurrence of pollen symptoms with negative findings to other causal factors of allergy. What light the electrophorectically prepared pollen allergens will throw on this subject is a matter for continued study. Abramson,[8] however, has shown that the potency of his active pollen fractions approximates that of a 1-33 or 1-50 solution of natural pollen (weight by volume) and its molecular weight of 5000 is about the same for all of these preparations.

Inhalant Allergens Other Than Pollens.—The diagnosis of skin refractory inhalant sensitivity other than pollen is not as easily made as it is with pollen skin refractory sensitivity. The major reason for this difficulty is the perennial nature of the symptoms when exposure to allergens is continual, intermittent or occasional. The exceptions are those cases specifically sensitive to certain molds (especially Alternaria, the latter found in greater concentration in the air during the late summer and early fall months) and those with purposeful or accidental exposure to animal danders. This history helps to clarify the role of such allergens. The most common inhalant sensitivity is house dust and some patients, despite making their homes as "dust-proof" as possible, continue to have symptoms which often clear up in a hospital room that is air-conditioned and dust-free. Various occupational allergens as seen in industry and in farming must be borne in mind. Various insecticide preparations used in theatres, indoors and outdoors, cannot be overlooked.

The major difficulty of setting up an eye test with dry allergens as a means of confirming the diagnosis of nonpollen inhalant respiratory allergy is the unavailability of nonirritating natural dry allergens with the more common sensitizing allergens such as house dust and dog, cat, horse and feather epithelium. Natural dry powders, however, such as orris root, pyrethrum, derris root, lycopodium, karaya gum, tragacanth and acacia deprived of oils, resins and other irritants, may be reliably employed for eye testing. The ordinary dry, powdered, chemically precipitated allergens used for the scratch test are too irritating for use for an eye test. When available only nonirritating, chemically precipitated, purified water soluble, powdered allergens could

be used for the eye tests when the scratch tests to these dry allergens are negative.

The incidence of skin negative nonpollen inhalant sensitivity is not as readily determined as it is in the case of pollen, for obvious reasons. The impression, however, is gained that the incidence of such sensitivity is appreciably significant and its recognition is of practical importance because, as with its pollen counterpart, patients in this group injected with the average top doses of inhalant extracts ordinarily given to the positive skin reacting patients, will monotonously fail to be relieved of their symptoms.

Inhalation tests with allergens are sometimes used. But it does not seem academically important nor practical to submit patients to the inherent dangers of the currently used inhalation test to confirm the diagnosis of skin test refractory sensitivity to nonpollen allergens. A reliable quantitative method of administering allergenic aerosols of high concentration may make tests of this kind valuable academically but impractical for general use.

Since the clinical symptoms of intolerance following exposure to house dust, molds, animal danders, insecticides or other nonpollen inhalant allergens is the final criterion of sensitization in patients with negative skin tests and since there is no easily available eye test to confirm the diagnosis, it becomes extremely important that a searchingly detailed history of each case be elicited. Moreover, it may be necessary to subject the patient to test environments or exposures, or both, before the causal allergen or allergens can be identified.

Depending upon the threshold of tolerance for a sensitizing allergen or allergens, the onset of respiratory symptoms in relation to the interval of time of exposure to the allergen varies in the same patient as well as from patient to patient. For example, in a patient clinically sensitive to dust or feathers or molds or any combination of allergens contained in bedding, asthma may manifest itself soon after exposure or it may be delayed for two or more hours after retiring. Moreover, if the patient has a superimposed skin refractory pollen sensitivity, then the onset of asthma following exposure to the nonpollen allergens probably would be accelerated and the asthma aggravated.

The symptoms of nonpollen skin negative inhalant allergy, unlike those of its pollen counterpart, often may involve the nasal mucosa only as limited seizures of allergic rhinitis or as the more troublesome perennial allergic rhinitis. In the latter instance, nasal polyps are frequently seen. Eventually, secondary chronic infectious sinusitis complicates the primary allergy along with troublesome infectious asthma. The incidence of asthma in the uncomplicated allergic rhinitis is low. It may be said that the incidence of asthma in patients with nonpollen skin refractory inhalant allergies is considerably lower than it is in the pollen sensitive patients with negative skin tests.

Treatment

Pollen Allergy.—The minimal protective dose for patients with tree and ragweed allergy, refractory by skin test, is 1 cc. of a 1-50 solution of pollen (weight by volume) and for grass allergy from 1 to 2 cc.

The average preseasonal schedule of pollen dosage and the number of doses injected (about 25) are shown in Table 1.

Table 1

PRESEASONAL TREATMENT OF SKIN REFRACTORY POLLEN SENSITIVITY

EQUIVALENTS FOR DIFFERENT STANDARDIZED POLLEN SOLUTIONS

DOSAGE		SOLUTION	POLLEN UNIT		MGM
No.	Cubic Centimeter	Weight by Volume	Freeman-Noon	Protein Nitrogen	Total Nitrogen
1	0.10 cc.	1:50,000	2	1.25	0.0003
2	0.20 cc.		4	2.5	0.0006
3	0.40 cc.		8	5	0.00012
4	0.08 cc.	1 5000	16	10	0.00024
5	0.15 cc.		30	19	0.00045
6	0.30 cc.		60	38	0.0009
7	0.06 cc.	1 500	120	77	0.0018
8	0.12 cc.		240	154	0.0036
9	0.25 cc.		500	320	0.0075
10	0.05 cc.	1 50	1,000	640	0.015
11	0.08 cc.		1,600	1,024	0.024
12	0.12 cc.		2,400	1,536	0.036
13	0.18 cc.		3,600	2,304	0.054
14	0.26 cc.		5,200	3,328	0.078
15	0.34 cc.		6,800	4,352	0.1024
16	0.42 cc.		8,400	5,376	0.126
17	0.50 cc.		10,000	6,400	0.15
18	0.60 cc.		12,000	7,680	0.18
19	0.70 cc.		14,000	8,960	0.21
20	0.80 cc.		16,000	10,240	0.24
21	0.90 cc.		18,000	11,520	0.27
22	0.70 cc.	1-33	21,000	13,400	0.315
23	0.80 cc.		24,000	15,360	0.36
24	0.90 cc.		27,000	17,280	0.405
25	1.00 cc.		30,000	19,200	0.45

One Freeman-Noon pollen unit is the active principle contained in 1/1,000,000 grain of natural pollen. The pollen extract solution is calculated on a weight by volume basis. 1 cc. of a 1-33 solution of pollen contains 30,000 Freeman Noon units and 1 cc. of a 1-50 solution, 20,000 units. Protein Nitrogen Unit is more properly referred to as PTA unit (phosphotungstic acid unit). One unit represents 0.00001 mg. of protein nitrogen. Protein nitrogen unit averages 60 per cent of the Freeman-Noon unit and 40 per cent of the total nitrogen. Total nitrogen 0.30 (MGM/cc) equals 20,000 Freeman-Noon units or 12,800 protein nitrogen units or 1 cc. of 1-50 solution of pollen (weight by volume).

Total nitrogen is the estimation of total nitrogen contained in a solution of pollen in which a given weight of natural pollen is extracted with Coca, or other extracting medium.

It should be stressed that a solution of pollen, weight by volume, is not clinically interchangeable with pollen extracts prepared and standardized on the basis of total nitrogen or protein nitrogen unit. The figures for total nitrogen, pollen units and solutions (weight by volume) are given to allow free translation of dosage between the different methods of standardization of the pollen extracts.

The interval of time between injections depends on the time the patient presents himself for treatment.

It will be noted from Table 2 coseasonal treatment is not included for the patient who presents himself for treatment for the first time during the pollen season because the subcutaneous

coseasonal injection method of treatment in these patients does not give as good results as that obtained with the intradermal technique. With the latter method of treatment the plan of dosage is similar to that used for the skin positive pollen reacting patients with the exception that the sole guide to advancing doses is the clinical response of the patient rather than the size of the resulting wheal at the site of the injection which, in the case of the skin negative reactor, remains unchanged from the initial traumatic wheal. On the whole, coseasonal therapy with any method of injection in these patients is not as efficacious as preseasonal treatment, using the subcutaneous injection technique.

When pollen treatment is commenced from 6 to 8 weeks before the season, the maximal protection dose frequently need not be more than 0.50 cc. of 1-50 solution. Treatment during the pollen season is maintained with maximal doses at intervals of five days. In these cases injection treatment may be started with a 1-5000 solution of pollen. In patients under treatment three months or more the top preseasonal protection dose of pollen may be reached and maintained at this level for one week after the onset of the pollen season. Thereafter, injections can be administered at weekly intervals with the dose reduced and maintained at one-half of the preseasonal level.

Table 2

PRESEASONAL TREATMENT OF SKIN REFRACTORY POLLEN SENSITIZATION

INTERVAL BETWEEN INJECTIONS

Period of Time Before Onset of Pollination	*Interval Between Injections*	*Injections Continued During the Pollinating Seasons*
Six Months or More	Weekly	Weekly
Four Months	Twice weekly for first two months and weekly thereafter	Weekly
Three Months	Twice weekly	Weekly
Two Months	Thrice weekly	Every five to seven days
Six Weeks	Daily for the first two weeks, thrice weekly second two weeks and twice weekly last two weeks	Every five days
One Month	Daily for first two weeks and thrice weekly for last two weeks	Twice weekly

The latter dose can be maintained after the close of the pollen season, if perennial treatment is planned, with injections given at intervals of 2 to 4 weeks. About 3 months prior to the beginning of the next pollen season the dose of pollen extract can be gradually stepped up to the average minimal protection dose at 2 to 3 week intervals. During the pollen season weekly injections are given with a reduction of dosage, as previously noted.

Pollen extracts are used in the eastern section of this country as follows: mixed ragweed (short and giant), mixed grasses (timothy, red top, orchard and June), mixed grasses and plantain, and trees (oak, alone or mixed with any combination of elm, maple, birch and ash).

Inhalant Allergy (nonpollen).—The most common inhalant allergen in this group is house dust. The extract we employ is a stock dust chemically purified by fractional precipitation.[10] The injections for the first 6 to 8 weeks are given twice weekly and thereafter once weekly until the top protection dose of 1 cc. of 1-400 solution has been reached. Higher doses have not afforded additional protection. Maintenance doses of 0.50 cc. can be given at 2 to 3 week intervals.

The schedule of dosage is as follows: 1:40,000 solution: 0.10 cc., 0.20 cc., 0.35 cc., 0.50 cc. 1:4000 solution: 0.10 cc., 0.20 cc., 0.30 cc., 0.40 cc., 0.50 cc. 1:400 solution: 0.07 cc., 0.10 cc., 0.15 cc., 0.20 cc., 0.30 cc., 0.40 cc., 0.50 cc., 0.60 cc., 0.70 cc., 0.80 cc., 0.90 cc. and 1.00 cc.

Animal danders, mold mixtures and other inhalant allergens are injected according to the following dosage schedules: 1:10,000 solution, 0.10 cc., 0.20 cc., 0.30 cc., and 0.40 cc. 1:1,000 solution, 0.07 cc., 0.12 cc., 0.20 cc., 0.30 cc., and 0.40 cc. 1:100 solution: 0.07 cc., 0.10 cc., 0.15 cc., 0.20 cc., 0.25 cc., 0.30 cc., 0.35 cc., 0.40 cc., 0.45 cc. and 0.50 cc. Higher doses may be given if necessary.

It should be emphasized that food allergy and dietary indiscretion or various nonspecific factors frequently aggravate or help initiate an attack of asthma or vasomotor rhinitis, or both.

Clinical and Immunological Observations

Degree of Asthma.—Of all patients with pollen asthma refractory by skin test those of the grass group suffer with asthma more severely and longer. Moreover, asthma is more severe in the refractory pollen group than it is in the uncomplicated pollen asthmatics with positive reactions by skin test. This observation does not apply to asthmatic patients with positive skin tests to nonpollen inhalant allergens.

Untreated cases with pollen and nonpollen inhalant asthma refractory by skin test become perennial asthmatics more readily than a comparable group of cases positive by skin test to pollen and nonpollen inhalant allergens.

General systemic reactions following therapeutic injections of pollen or other inhalant

allergens rarely occur in patients refractory by skin test.

Local reactions at the site of the injection in the skin refractory group occur much less frequently than in a comparable group of cases positive by skin test to pollen or other inhalant allergens. Moreover, the degree of the local reaction in the skin refractory group is rarely more than mild or moderate, and bears no relation to the general reaction.

An initial skin test refractory case always remains a skin test refractory case, and skin sensitizing antibodies (reagins) cannot be demonstrated.

Negative skin reactions may be obtained in the same patient to the pollen of one season and positive reactions to the pollens of another season with a positive history of intolerance to the pollens of both seasons.

Negative skin reactions may be obtained in the same patient to the pollen of one season with a history of intolerance and positive reaction to the pollen of another season with a history of tolerance.

Skin refractory sensitivity to one or more nonpollen inhalant allergens with a positive history of intolerance can occur in a patient who also shows positive skin reactions with a history of tolerance to other nonpollen inhalant allergens.

Children under 6 years of age with pollen intolerance and negative skin tests are not suitable subjects for the dry pollen eye tests. The excessive use of epinephrine hydrochloride or ephedrine-like drugs or antihistamine drugs does not induce patients with inhalant respiratory allergies to become skin test negative reactors to causal allergens.

Summary and Conclusions

Refractoriness to pollen and nonpollen inhalant allergens by skin test in patients with respiratory allergies is a definite clinical entity, the diagnosis of which is primarily based on the clinical history of recurrent symptoms of intolerance to pollens and other inhalant allergens. Of significant clinical interest is the observation that these patients with skin test inhalant negative reactions, especially to pollens, are invariably asthmatics. The treatment of such patients is of clinical and extreme practical importance because they require considerably higher top doses of specific allergenic extracts for relief of symptoms than the patients with skin test positive reactions to corresponding inhalant allergens.

The results of treatment with allergenic inhalant extracts in the skin test negative reactors are as good if not better than the results obtained with corresponding allergenic extracts in the skin test positive reactors. The optimal protective doses of allergenic extracts for the skin negative reactors are the same both for children and adults.

The speculation that the good results obtained are due to the nonspecific effect of such necessary large top doses of specific allergenic extracts is weak because such interpretation not only begs the question but stretches the imagination far afield. It is generally agreed that specific inhalant allergy, especially pollen allergy, is a condition which responds extremely poorly, if at all, to the most potent nonspecific measures. Moreover, a ragweed-sensitive case refractory by skin test treated with a mixed grass extract, or vice versa, afforded no relief to the patient. Pollen extract is certainly one of the poorest nonspecific agents known.

In the light of our experience the effectiveness of pollen or other inhalant allergenic therapy for persons with respiratory allergy with negative cutaneous reactions to these allergens is based solely on specific immunization.

References

1. Peshkin, M. M.: Unpublished data.
2. Kahn, I. S.: M. J. & Rec. 121,664, 1925.
3. Peshkin, M. M.: Am. J. Dis. Child. 31:763, 1926.
4. Ibid.: J. Allergy 3:20, 1931.
5. Ibid.: Unpublished data.
6. Kahn, I. S.: Personal communication.
7. Fineman, A. H.: J. Immunol. 2:465, 1926.
8. Abramson, H. A.: Personal communication.
9. Cooke, R. A. & Stull, S.: J. Allergy 4:87, 1933.
10. Efron, B., Boatner, C. H. & Dorfman, R. I.: Science 91:389, 1940.

. . . one man with courage makes a majority.

ANDREW JACKSON.

Special Article

West Virginia Central Cancer Registry*

N. H. Dyer, M. D.

THE purpose of this paper is to relate some of our experiences in organizing and administering a central cancer registry in West Virginia and to point out some of its potentialities. The registry is sponsored jointly by the West Virginia Division of the American Cancer Society and the State Department of Health and is now in its fourth year.

Developmental Background

As the health departments expand their services to assist physicians and hospitals in the control of chronic diseases it has been found necessary to collect, record and analyze case data over a long period of time. Most health departments have maintained for several years a tuberculosis register. More recently the interest has centered on the establishment of cancer registries. It is intended that a cancer registry serve primarily as an aid in the control or follow-up of the disease. Such a registry is more than a file of index cards of cases reported. It becomes a current record by the addition of subsequent information collected at regular intervals.

The person responsible for providing the spark which led to making our registry a reality is the President of the West Virginia Division, Dr. Chauncey B. Wright of Huntington. He was most helpful in giving advice and counsel.

Planning began in 1955. Many preliminary conferences were held to set up procedures for organization. It was first thought that the registry would not extend beyond the sixteen hospitals having tumor clinics. We began receiving requests for information, however, from other hospitals, indicating that we were dealing with a statewide reporting program.

Legal Aspect

Reporting of cancer cases is not a requirement in West Virginia. Therefore, all reporting is voluntary. One question encountered early in setting up the registry was whether physicians could legally report their private cases to the health department. Would it be a violation of the physician-patient relationship?

An Attorney General's opinion was requested. He ruled that physicians would not be in violation of the West Virginia statutes in making such reports to the State Department of Health.

The entire plan of operation of the registry and the Attorney General's opinion were explained to the Council of the West Virginia State Medical Association. Unanimous approval was given.

Physical Facilities and Personnel

The registry is housed in space provided by the State Department of Health as a part of the Division of Cancer Control under the supervision of the Program Director of that Division. Other personnel consists only of one registry secretary.

Funds for Operation

The Cancer Society provides funds for the salary of the secretary and the purchase of record forms, making a total of slightly more than four thousand dollars annually. We feel this amount is a bare minimum to keep the registry in operation. It does not allow for any expansion in the way of providing consultative services to the local registries, case follow-up or statistical evaluation and application of registry data.

Hospitals Reporting

The registry was opened for reports on January 1, 1957. We were surprised at the early interest in the program by hospitals, physicians and others engaged in cancer control work. As stated, we first felt that central registry activities should be limited to the sixteen hospitals with tumor clinics. Very soon smaller hospitals requested that they be included. Participation

The Author

- **N. H. Dyer, M. D., Director, State Department of Health, The Capitol, Charleston, W. Va.**

***Presented before the Region II Meeting of the American Cancer Society at The Greenbrier in White Sulphur Springs, September 10, 1960.**

Submitted to the Publication Committee, September 12, 1960.

spread rapidly and by 1958 we had 100 per cent participation, totaling 70 hospitals. An average of 3,500 cases are reported annually.

Local Registries

The policy has always been to stimulate, strengthen and encourage local cancer registries. This has been done to the extent of limited funds and personnel. Certainly local registries are greatly needed. The writer feels that it is not unnecessary duplication of statistical records to have a strong central registry as a repository and source of statewide information regarding living cancer patients.

Strengths of Central Registry

1. Demonstrates excellent cooperation by the Cancer Society, a voluntary agency, and the State Department of Health, an official agency, in establishing and maintaining, jointly, a program leading to cancer control.

2. Excellent support given by the hospitals and physicians without which there would be no registry.

3. Provides a pool of statewide information available for evaluation by physicians, statisticians and other health workers.

4. Stimulates and strengthens local registries.

5. Makes available factual information regarding the prevalence of certain types of cancer, sex and age distribution and effectiveness of methods of treatment.

6. Supplies information to determine how early treatment is given.

7. Provides a means of measuring the magnitude of the cancer problem in West Virginia.

Weaknesses of Registry

1. Inadequate funds to employ additional personnel to provide more consultative services to local registries.

2. A statistician needed to correlate and interpret the accumulated data for use by the West Virginia Cancer Society, the American Cancer Society, health departments, physicians, hospitals and those engaged in research.

3. Inadequate funds to provide an educational program.

Summary

The registry has been evaluated by representatives from the American Cancer Society and the United States Public Health Service. Recommendations have been made by both agencies. We have attempted to carry out those recommendations as far as possible.

We are pleased with the development of the registry and feel that it will provide a source of statistical information which will prove of great assistance in controlling cancer in West Virginia.

Placebos

The majority of medicines used from the earliest times have been placebos. Originally these were nauseous biological by-products, but with increasing sophistication, the chemical laboratory has produced, often at great expense, more palatable substitutes. As each is introduced, it is followed by a cluster of favorable reports (quaintly called the "literature"), and it is a wise physician who follows the advice variously attributed to Sydenham, Trousseau, and Osler that the physician should treat as many patients as possible with new drugs while they still have the power to heal.

The placebo response has served doctors well. Because of it they have throughout the centuries been held in high esteem, despite the dearth of medicines with beneficial therapeutic effect. On the rare occasions when they had an effectual remedy, as in the chance use of meadow saffron to treat gout or burnt sponge to treat simple goitre, they had no means of evaluating their results. At the present time many of the medicines commonly administered are placebos. However, as the experienced doctor knows, in most of the minor psychiatric and psychosomatic conditions the potent therapeutic agent is the doctor himself, and he can often get good results with whatever he prescribes if he has a good relationship with the patient, spends some time with him, and tries to understand his problems.—British Medical Journal.

94TH ANNUAL MEETING

of the

West Virginia State Medical Association

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The President's Page

Snow, Sleeth, Stahr and Service

THE month just past saw many significant happenings in West Virginia. We lost the President of our University to the new Administration in Washington, where he will serve as Secretary of the Army; we inaugurated a Governor; an income tax was enacted into law to raise the revenues to provide the services we ask of our state government; and we got a new Dean at our Medical School, our own Dr. Clark K. Sleeth.

We were all saddened by the loss of Elvis J. Stahr as President of West Virginia University. We are proud, however, of this high honor that has come to him. We are grateful for the progressive leadership that he gave to our University and stand ready to roll out the "Welcome Home" mat when his tour of duty is completed.

We offered our wholehearted cooperation to the new Governor, the Honorable W. W. Barron, and he in turn named an Advisory Committee from the State Medical Association to consult with him on medical matters concerning our institutions and the people of our state. The members of this committee are: Drs. Frank J. Holroyd, chairman, Walter E. Vest, John W. Hash, J. P. McMullen, and George F. Evans.

In addition to the above, the Association was honored by former Governor Cecil H. Underwood by the appointment of one of our members, Dr. Pat A. Tuckwiller, to the Advisory Board of the Department of Public Assistance.

At a joint meeting of the West Virginia Association for Mental Health and the American Legion, Governor Barron told of his concern and his plans for the improvement of services to the mentally ill, emotionally disturbed, and the alcoholics among our citizenry.

We now feel that we of the medical profession are in a better position than ever before to render an effective service to West Virginians in cooperation with the administrative branches of our government. We accept this responsibility and will do our best to merit it.

At this writing, the fate of the Medical Examiner's Bill is uncertain. We still have hopes of enhancing our teaching program at the Medical Center and elevating the stature of our medico-legal services to our state. If for any reason this measure should fail to pass, it is hoped that future Legislatures will see the merits of the bill. It is reasonable to assume that industries could be attracted to our state if we had this protection to offer. It is to be hoped that never again will an expert from out of the state be able to say to our Legislators: "West Virginia is a good state to go to to commit murder."

It was with great personal pride on the part of all of us that we learned of the appointment of Dr. Clark K. Sleeth as Dean of the West Virginia University School of Medicine. We are aware of his ability, integrity, industry, and dedication to Medicine. We pledge him our support, our loyalty, and our deep affection.

John W. Hash

John W. Hash, M. D., President

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EDITORIALS

GOVERNOR BARRON'S LIAISON COMMITTEE

Just a few days after his election to high office, Governor W. W. Barron, at a conference with officers of the West Virginia State Medical Association, outlined a plan for cooperative consideration and action by the Executive Department of the State Government and the medical profession in matters pertaining to the health of our people.

Following through on his plan, the Governor has now appointed, with the unanimous approval of the Council of the State Medical Association, a five-member physician committee to serve as liaison between his office and the Association. The committee will serve strictly in an advisory capacity.

Dr. Frank J. Holroyd of Princeton, AMA delegate and chairman of the Association's Legislative Committee, is the chairman of the group, and other members are Drs. Walter E. Vest, Huntington, James P. McMullen, Wellsburg, George F. Evans, Clarksburg, and John W. Hash, Charleston.

Doctor Hash is the President of the State Medical Association and all of the others are past presidents. All have the respect and absolute confidence of their confreres. In seeking Council-approval of the creation of this Advisory Committee, Governor Barron has let it be known that he will work closely with the medical profession in his announced desire to provide adequate medical care for all of our people, including those unfortunate enough to be confined in our state institutions.

We heartily commend Governor Barron for conceiving this plan to seek full cooperation with the members of the medical profession, a plan that can be far-reaching, one that most certainly augurs well for the success of a campaign to improve the health and well-being of the people of West Virginia.

WHITHER THE INTERNSHIP?

We listened intently to the debate on the internship at the recent meeting of the Congress on Medical Education and Licensure in Chicago, and as the argument waxed and waned pro and con, we developed some impressions as to the foreseeable future concerning continuing medical education in the immediate postgraduate years.

First, the internship is here to stay, certainly for a long time to come. We were rather surprised at the definition of "internship" hatched by the Congress—"the first year of training after receiving the M. D. degree." If that definition is accepted by medical educators and hospitals, the term "two-year internship" will be tossed into the lexicographic discard. Frankly, we cannot find too much fault with the definition for it is clear cut, easily understandable, and automatically presents a definite time limit. After the first post-doctoral year, the trainee would be a "resi-

dent" regardless of the type of training engaged in.

Second, the medical school hospital will retain and maintain the internship year regardless of the hubbub of the community hospitals contrariwise. This hubbub is merely the ebullition of wishful thinking on the part of non-university hospitals and faces an impregnable stone wall. As we listened, we concluded also that graduates who expect to be researchers and medical teachers should serve their internship in university hospitals. As for those graduates planning to go into active private practice, we felt they would do well to choose a community hospital which has a good training program with plenty of patients of all types, and a teaching-minded medical staff. This is our own personal reaction, for, while the debaters did a good job, we doubt if they made many converts to either side.

We reached our conclusions largely because the university hospital sets up an ideal goal, one often unattainable on the battlefield of actual practice. In the community hospital, reality is faced and the trainee learns how to meet emergencies and get good results when working under less-than-ideal conditions. Also, he is broadened and the chance of so-called "inbreeding narrowness" is avoided. Furthermore, in private practice he handles a clientele more interested in prompt recovery than in being human guinea pigs and being worked out clinically and biochemically with more or less attendant discomfort and at considerable expense.

Third, no community hospital should attempt a training program unless it is willing to make the training actually worth-while to the trainee. Otherwise, the hospital is morally dishonest. Moreover, the staff should be willing and able to devote sufficient time to the trainees. We fear too many staff members take this obligation altogether too lightly.

Fourth, we are convinced that the community hospital has a definite place in postgraduate training, that it can do a very satisfactory job, but that a good educational program must be planned and translated into action. The fact was stressed over and over that an internship should be primarily an educational experience for the intern and only secondarily a service to the hospital in which he serves. Moreover, we predict that accreditation for intern and residency training will be more difficult to obtain and to maintain in the coming years.

Fifth, we predict that in the not-too-distant future general practice will be classified as a specialty, that it will have its own certification board, and that a year's residency will be required after a rotating internship. Certainly there was in the meeting a strong sentiment to consider "Family Practice" a specialty now. Such a development would complete the fragmentation of medicine, whether for good or evil, and only specialties would remain.

'THE DOCTORS' BIG JOB'

The press columnists currently occupy a unique niche in the moulding of public opinion. Like doctors of medicine, they range from poor to excellent, but by and large they afford the reading public food for thought and some of them are real downright philosophers. One of this particular segment whom we have enjoyed over the years is George Matthew Adams. Rarely indeed does he present ideas with which we can disagree. His recent column under the headline we quote above is so realistic and so apropos of the job the doctors are trying to do for the American people that, with the special permission of the George Matthew Adams Service, we quote it in its entirety:

"I am amazed when I read of all that is being done by the doctors of the world to keep people alive, healthier and happier.

"They kept our former President well and happy through two terms—almost!

"People today are the doctors' responsibility. And so are those who aid them in their work—the nurses.

"The doctors plant confidence and courage in their patients' minds.

"The skill of these specialists is being manifested every day of the year. Doctors are devoting their lives to the job of keeping those under their care full of cheer and hope.

"Those familiar two letters—M. D. are among the most significant initials in this world. And filled with pride is every one who worked to own them!

"Doctors lock arms with the scientists today and many there are who have made discoveries that have placed their names high in the skylight of fame. But doctors are no boasters; these M. D. men are modest ones and are forever studying to rise higher in their profession.

"All glory to doctors all!"

Thank you, Mr. Adams. Too often, undeservedly we think, some of your confreres needle us men of medicine, and we do appreciate your tribute which may be more than we actually deserve. Despite the fact that you elevate Thoreau to a higher literary pedestal than we have ever been able to assign him, all is forgiven and we are in your corner permanently.

GENERAL NEWS

Council Names Committee To Study Civil War Records of Physicians

West Virginia medicine is preparing to participate actively in the Civil War Centennial. Following the suggestion of Dr. E. E. Myers of Philippi, chairman of the state Civil War Centennial Commission, the Council of the West Virginia State Medical Association has named a committee for the purpose of studying the records of physicians in the Civil War, together with the records of hospitals and medical units.

Dr. Howard G. Weiler of Wheeling was named chairman of the Association's committee at the winter meeting of the Council held in Charleston on February 5. Dr. James C. Hazlett, also of Wheeling, was named a member of the committee and Doctor Weiler was authorized to select other state physicians to serve with him and Doctor Hazlett.

Election of Honorary Members

The following physicians were elected to honorary life membership in the Association:

Society	*Physician*	*Address*
Cabell	I. I. Hirschman	Huntington
Greenbrier	S. F. Yoho	Peterstown
Marshall	S. F. Yoho	Moundsville
Monongalia	E. B. Tucker	Morgantown
Raleigh	Thomas Garrett	Sprague
	J. E. McKenzie	Beckley

Governor Names Medical Advisory Committee

The Council acted favorably upon the suggestion of Governor W. W. Barron that he be furnished with the names of members of the State Medical Association who would be willing to serve as members of a Medical Advisory Committee. The Council directed that the names of the following physicians be submitted to the Governor for his consideration:

Frank J. Holroyd, Princeton; George F. Evans, Clarksburg; James P. McMullen, Wellsburg; Walter E. Vest, Huntington; and John W. Hash, Charleston. Early in the same week, Governor Barron announced the appointment of these physicians as a committee to serve as liaison between his office and the State Medical Association. Doctor Holroyd was named as chairman of the group.

Governor Barron's Suggestions Approved

Doctor Holroyd relayed to the Council the request of Governor Barron that consideration be given to the use of the Barboursville State Hospital in connection with the commitment of alcoholics for treatment and rehabilitation. Such commitment would be on a voluntary basis or as the result of a legal proceeding. The Governor's suggestion met with the unanimous approval of the Council.

A third request was that the Council consider the suggestion for the establishment of West Virginia University-sponsored resident training programs at all state institutions, and the Council went on record unanimously as approving the program in principle.

Dr. Geoffrey T. Mann of Richmond, right, Chief Medical Examiner of the Commonwealth of Virginia, and Dr. Peter P. Ladewig of Charleston, spokesman for the West Virginia Association of Pathologists, were among those speaking in favor of the Medical Examiner's System Bill at hearings held by the Senate and House Committees on the Judiciary, in Charleston on February 7.

Amendments to MAA Fee Schedule Approved

The president, Dr. John W. Hash, reported that he and the executive secretary, acting in the absence of the third member of the special MAA committee, Dr. James S. Klumpp of Huntington, chairman of the Medical Economics Committee, who is on an extended visit in Florida, had held several conferences with Mr. Thomas R. Egbert, then director of the Department of Public Assistance, who was in charge of the new Medical Assistance for the Aged program in West Virginia.

Proposed amendments to the fee schedule were discussed at these conferences and an agreement reached finally the first of February.

Doctor Hash reported that adjustments had been made in fees for house visits (day and night), physical examinations and separate examinations by specialists,

with extended fee schedules for laboratory, x-ray and diagnostic examinations, including EKG, etc.

The amended schedules for x-ray examinations and laboratory fees are for the most part based upon 75 per cent of the Charleston "Plan A" Blue Shield schedule.

The effort to obtain an adjusted fee schedule for anesthesia failed, as Mr. Egbert said that the fees set forth in the original MAA schedule are already based on 75 per cent of the Charleston "Plan A" schedule.

It was agreed that negotiations would be continued in the future with Mr. Bernard Smith, who on February 1, succeeded Mr. Egbert as director of the Department of Public Assistance.

Several members of the Council discussed the report rendered by Doctor Hash, after which the amended fee schedule was accepted and approved.

Report of Legislative Committee

A full report concerning pending legislation of interest to the medical profession was submitted by Doctor Holroyd, chairman of the Legislative Committee.

Status of Bills Reported In Legislative Bulletins

Complete reports concerning action by the Legislature on bills of interest to the medical profession are incorporated in "Legislative Bulletins" that are being sent frequently to all those on our *Journal* mailing list.

The Bulletins that are being mailed from the headquarters offices of the State Medical Association in Charleston are timed so as to take advantage of report dates by key committees and subsequent action by the Senate and House of Delegates.

Through the use of Bulletins, we will continue to bring to our members and readers as promptly as possible up-to-the-minute activities. The reports that are in effect news stories are being prepared and distributed in lieu of lengthy news stories that would ordinarily appear later in *The Journal.*

The final Bulletin will be mailed within a day or two after adjournment of the Legislature on March 11.

Doctor Holroyd said that mature study had been given to the bills at a meeting of his committee the previous evening and recommendations were made for approval or disapproval of several of the bills.

Most of this information is being relayed to the members of the Association in legislative bulletins mailed frequently from the headquarters offices in Charleston. The mailing of bulletins will continue until adjournment of the Legislature on March 11.

The action of the Legislative Committee as reported by Doctor Holroyd was unanimously approved.

The meeting was attended by Dr. J. C. Huffman of Buckhannon, Chairman; and Dr. John W. Hash, President; Dr. D. E. Greeneltch, President Elect; L. J. Pace, Vice President; and Drs. Richard E. Flood, S. Elizabeth McFetridge, C. R. Davisson, Charles L. Goodhand, Harold Van Hoose, Clyde A. Smith and Theodore P. Mantz, Councillors; and Charles Lively, secretary ex officio, and William H. Lively, executive assistant.

The meeting was also attended by Dr. Frank J. Holroyd of Princeton, AMA Delegate, and Dr. Thomas G. Reed of Charleston, AMA alternate.

Regional Medicolegal Conference In Louisville, April 14-15

More than 400 physicians and attorneys from 16 states are expected to attend a Regional Medicolegal Conference at the Kentucky Hotel in Louisville, April 14-15. The meeting will be the second of a series of three medicolegal meetings sponsored by the Legal and Socio-Economic Division of the American Medical Association. Other conferences will be held in San Francisco and New York.

The meeting will feature panel discussions on "Res Ipsa Loquitur in Medical Professional Liability Cases," "Use and Misuse of Demonstrative Evidence in Personal Injury Cases," "Expert Medical Testimony," and the "Status of Physician-Attorney Relations."

A half-day session will be devoted to developments and trends in judicial procedures. Included will be a consideration of the separation of the questions of liability and damages in the trial of a case, impartial medical testimony projects, developments in pre-trial hearings and discovery procedures, and the "liability without fault" approach in all personal injury litigation.

Another half-day session will deal with a discussion of the most important cases in the medicolegal field during the past 18 months.

Among the speakers at the meeting will be Crawford Morris of Cleveland, an authority on res ipsa loquitur, Lou Ashe of San Francisco, past president of the National Association of Claimants' Compensation Attorneys, and Judge Irving Goldstein of Skokie, Illinois, an expert on medical trial technique.

West Virginia physicians and attorneys are invited to attend the two-day meeting which will open at noon on Friday, April 14. The program will be concluded on Saturday at 4:30 P. M.

Registration fee for the conference will be $5 to cover the cost of a luncheon on Saturday and a copy of the proceedings. Further information may be obtained by writing C. Joseph Stetler, Director, AMA Socio-Economic Division, 535 North Dearborn Street, Chicago 10, Illinois.

Relocations

Dr. Weldon Harloe of Matoaka has moved to Fremont, North Carolina, where he is affiliated with the Fremont Clinic, and where he will continue in general and pediatric practice.

Medical Meetings, 1961

The following is a partial list of national, state and district medical meetings scheduled for 1961:

Mar. 6-8—New Orleans Grad. Med. Assembly, New Orleans.
Mar. 6-9—S. E. Surgical Congress, Miami Beach.
Mar. 12-17—American College of Allergists, Dallas.
Apr. 3-8—Gill Memorial's Spring Conf., Oph. and Otol., Roanoke, Va.
Apr. 6-8—W. Va. Acad. Oph. and Otol., White Sulphur Springs.
Apr. 10—Medical Licensing Board, Charleston.
Apr. 10-12—Am. Acad. Pediatrics, Washington, D. C.
Apr. 10-13—Ohio St. Med. Assn., Columbus.
Apr. 14-15—W. Va. Chap. ACS, White Sulphur Springs.
Apr. 14-15—AMA Medico-Legal Conf., Louisville, Ky.
Apr. 17-20—AAGP, Miami Beach.
Apr. 21-22—W. Va. St. Soc. Med Technologists, Wheeling.
Apr. 26-28—Maryland Med. & Chirurgical Faculty, Baltimore.
May 5-7—Am. Soc. Internal Med., Miami Beach.
May 8-12—Am. Coll. Physicians, Miami Beach.
May 10-12—W. Va. PH Assn., Morgantown.
May 19-21—W. Va. Chap. AAGP, Civic Center, Charleston.
May 22-25—Am. Urological Assn., Los Angeles.
June 22-26—ACCP, Hotel Commodore, New York City.
June 26-30—Annual Meeting, AMA, New York City.
July 23-26—W. Va. Dental Assn., White Sulphur Springs.
Aug. 24-26—W. Va. State Medical Association, The Greenbrier, White Sulphur Springs.
Oct. 2-6—Am. Coll. Surgeons, Chicago.
Oct. 18—W. Va. St. Nurses Assn., Clarksburg.
Oct. 19-21—W. Va. Hospital Assn., Morgantown.
Oct. 27-29—PG Institute, Martinsburg.
Nov. 6-9—Southern Medical Assn., Dallas, Texas.
Nov. 28-Dec. 1—AMA Clinical Meeting, Denver.

PG Course in Urology

A Postgraduate Continuation Course in Urology, "Current Urologic Problems," will be presented by the Frank E. Bunts Educational Institute, an affiliate of the Cleveland Clinic Foundation, in Cleveland, March 23-24, 1961.

Full information concerning the course may be obtained by writing the Education Secretary, The Frank E. Bunts Educational Institute, 2020 East 93rd Street, Cleveland 6, Ohio.

ACOG Annual Meeting in Florida

A program of postgraduate courses will be offered this year for the first time by the American College of Obstetricians and Gynecologists in conjunction with the 10th annual meeting of the Association at the Americana Hotel in Bal Harbour, Florida, April 20-28.

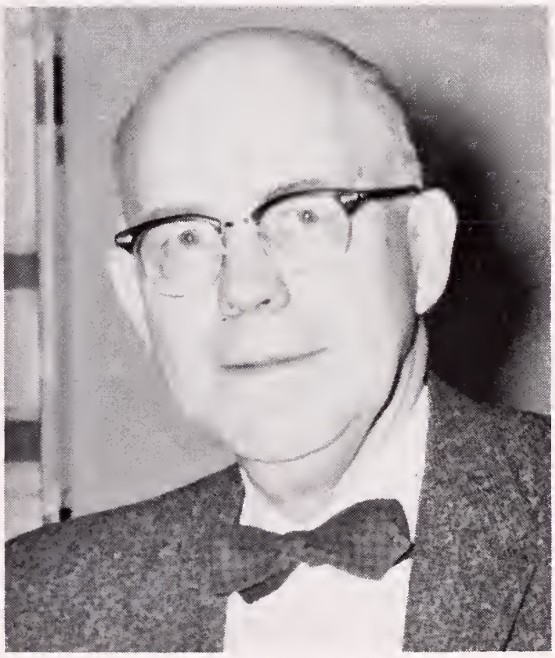
The postgraduate courses will include genetics, statistics, radiation physics, parenteral nutrition and steroid metabolism. The courses will be conducted by prominent authorities in the field and a co-leader for each session will demonstrate the subject's practical application to obstetrics and gynecology.

More than 2,000 physicians and guests are expected to attend the general clinical session, April 24-28. In addition to formal lectures, there will be 240 breakfast conferences, 92 clinical conferences and nine correlated seminars.

Dr. Charles A. Zeller Assumes Duties As Mental Health Director

Dr. Charles A. Zeller, Superintendent of Weston State Hospital, has been named by Governor W. W. Barron as Director of the Department of Mental Health. He succeeds Dr. R. P. Hagerman of Cameron, resigned. Doctor Zeller assumed his new duties in Charleston on February 1.

A native of Factoryville, Pennsylvania, Doctor Zeller was graduated from Bucknell University. He received



Charles A. Zeller, M. D.

a B. S. degree from the two-year School of Medicine at West Virginia University in 1925, and an M. D. degree from the University of Buffalo School of Medicine in 1927.

He interned at Scranton State Hospital in Scranton, Pennsylvania, 1927-28, and then joined the staff of the Danville Hospital in that state. In 1931, he was transferred to the Fairview State Hospital for the Criminal Insane as clinical director and acting assistant superintendent. He was named superintendent of the hospital in 1936.

Doctor Zeller was named superintendent of the Philadelphia State Hospital in 1941 and, in 1946, he accepted appointment as director of the Department of Mental Health in Michigan. The following year he served as director of the Iowa Council of Mental Health.

In 1949, Doctor Zeller was appointed superintendent of Weston State Hospital. Two years later he was named Chief of Psychiatry at the VA Hospital in Clarksburg. In 1958, he resigned from the VA to become clinical director at the Southwestern State Hospital in Marion, Virginia, and in June of last year he returned to Weston State Hospital as Superintendent.

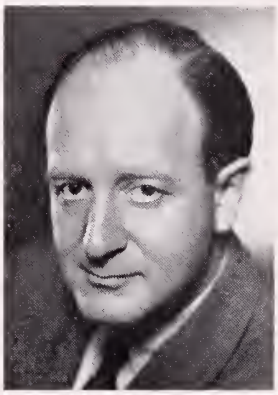
Doctor Zeller was married to the former Wanda Brown of Point Pleasant, and they have two children.

W. Va. Acad. Oph. and Otol. To Meet At The Greenbrier, April 6-8

Four prominent physicians and surgeons will appear as guest speakers at the 14th Annual Meeting of the West Virginia Academy of Ophthalmology and Otolaryngology which will be held at The Greenbrier in White Sulphur Springs, April 6-8. Dr. John A. B. Holt of Charleston, the president, will preside during the three-day meeting.

Registration will open at 2 P. M. on Thursday, April 6, and several committee meetings will be held

John J. Shea, M. D.



Irving H. Leopold, M. D.

that afternoon. A social hour has been scheduled for the evening.

Doctor Holt will deliver an address of welcome at the first scientific session on Friday morning, April 7. The second scientific session will be held on Saturday morning. Each guest speaker will present two papers during the meeting.

The guest speakers and their subjects are as follows:

"Recent Developments and Personal Experiences in Cataract Surgery" (Part I and Part II)—Harvey E. Thorpe, M. D., Pittsburgh, Pennsylvania.

"Therapy of Vascular Diseases of the Fundus," and "Management of Uveitis."—Irving H. Leopold, M. D., Philadelphia, Pennsylvania.

"Laryngeal Keratosis: A Clinico-Pathologic Problem," and "Neck Dissection in Cancer of the Larynx."—F. Johnson Putney, M. D., Philadelphia Pennsylvania.

"Fenestration of the Oval Window After Five Years," and "Vein Graft Tympanoplasty."—John J. Shea, M. D., Memphis, Tennessee.

In addition to the program outlined above, Mr. Philip Salvatori of Obrig Laboratories will present a demonstration of the various techniques of contact lens fitting.

A business meeting will be held following the second scientific session on Saturday morning. Officers of the Academy are as follows:

Dr. John A. B. Holt of Charleston, president; Dr. Albert C. Esposito of Huntington, president elect; Dr. William K. Marple of Huntington, vice president; Dr. Worthy W. McKinney of Beckley, secretary-treasurer; and Drs. James T. Spencer of Charleston and Alan Fawcett of Wheeling, directors.

A cordial invitation to attend the meeting has been extended by the Academy to all practicing physicians in the state. The registration fee for non-members will be $25, which includes the scientific program, social hours and other Academy functions.

Further information concerning the meeting may be obtained by writing Dr. Worthy W. McKinney, Secretary-Treasurer, 109 East Main Street, Beckley, West Virginia.

New Association Members

Dr. Irwin M. Bogarad, 3101 Main Street, Weirton (Hancock). Doctor Bogarad was born in Cleveland, Ohio, and was graduated from West Virginia University. He attended the two-year School of Medicine at the University and received his M. D. degree from the Medical College of Virginia in 1954. He interned at E. J. Meyer Memorial Hospital in Buffalo, New York, 1954-55, and served residencies at the Montefiore Hospital in Pittsburgh and the Lahey Clinic in Boston. He served with the Medical Corps of the United States Navy, 1956-58. His specialty is internal medicine.

* * * *

Dr. W. Alva Deardorff, 517 Medical Arts Building, Charleston (Kanawha). Doctor Deardorff, a native of South Charleston, was graduated from West Virginia University. He attended the two-year School of Medicine at the University and was graduated from the Medical College of Virginia in 1956. He interned at Charleston Memorial Hospital, 1956-57, and served a residency at Henry Ford Hospital in Detroit, Michigan, 1957-60. He served with the United States Army, 1946-48. His specialty is radiology.

* * * *

Dr. Herbert P. Stelling, 4517 MacCorkle Avenue, S. W., South Charleston (Kanawha). Doctor Stelling was born in Augusta, Georgia, and was graduated from Emory University. He received his M. D. degree from the Medical College of Georgia in 1951, and interned at Charity Hospital in New Orleans, 1951-52. He served residencies at the E. A. Conway Memorial Hospital and Charleston General Hospital. He served as a Chaplain in the USNR, 1944-46, and was previously located in India.

Physicians Art Exhibit at AMA Meeting

The American Physicians Art Association of the American Medical Association is planning a "best yet" art show this year at the American Medical Association Convention in New York City. Adequate and choice exhibit space is available in the magnificent exhibit building where it is estimated that more than 20,000 physicians and guests will view the exhibits.

All members of the AMA are urged to join the APAA and enter their art pieces, including oil and water color paintings, sketches, sculpture, photography, etc. For further information concerning hanging requirements and fees, write Dr. Albert A. Richman, Secretary, APAA, 307 Second Avenue, New York 3, N. Y.

Air Pollution Symposium at Tech On Thursday, April 13

The first air pollution symposium sponsored by the Montgomery Chamber of Commerce and the West Virginia Institute of Technology will be held in the WVIT Little Theatre in Montgomery on April 13, 1961.

The announced purpose of the symposium is to provide fundamental information on air pollution, relating to health, community development, and air pollution abatement.

The meeting will be called to order at 9:30 A.M. and short addresses by President W. B. Axtell of WVIT, President Gordon Bilheimer of the Montgomery Chamber of Commerce, and L. C. Nelson, WVIT Dean of Engineering, will follow.

The first formal address will be presented at ten o'clock by Jean J. Schueneman, Chief of Technical Services, Air Pollution Engineering Research; Dr. N. H. Dyer, State Director of Health, the second speaker on the morning program, will discuss air pollution in West Virginia; and the final paper will be presented by Emerson Venable of Pittsburgh, member of the air pollution control advisory committee for that city. His subject will be "The Importance of Clean Air for Industrial Growth."

A luncheon will be served in the WVIT Cafeteria at one o'clock and the principal address will be delivered by Dr. Chauncey D. Leake of Columbus, Ohio, Assistant Dean of the Ohio State University College of Medicine. He will discuss "Immediate and Long Range Effect of Air Pollution on Health."

The meeting will close with an industrial panel discussion, with W. G. Thompson of Montgomery, as moderator. The panel will be composed of representatives of Union Carbide Chemicals Corporation, E. I. du Pont de Nemours and Company, and Appalachian Power Company.

Doctor Ryan Reappointed Member Of NSPB Committee

Dr. Ralph W. Ryan of Morgantown has been reappointed a member of the Industrial Advisory Committee of the National Society for the Prevention of Blindness. The appointment was announced by Dr. John W. Ferree, Executive Director of the Society.

Doctor Ryan has served as a member of the committee for five years, during which time there has been marked expansion of an industrial eye safety incentive program known as the "Wise Owl Club."

MLB to Meet in Charleston on April 10

The spring meeting of the Medical Licensing Board will be held in Charleston, April 10, 1961, for the purpose of examining applicants for licensure to practice medicine in West Virginia.

Southern Medical in Dallas, Nov. 6-9

The 55th Annual Meeting of the Southern Medical Association will be held in Dallas, Texas, November 6-9, 1961.

Conference on Pulmonary Diseases In Roanoke, March 26-28

The Ninth Annual Tri-State Case Conference on Pulmonary Diseases will be held at the Hotel Roanoke in Roanoke, Virginia, March 26-28. The conference is being sponsored by the Trudeau Societies of West Virginia, Virginia and North Carolina.

Registration for the three-day meeting will open on Sunday afternoon, March 26, at four o'clock. The speaker at the first scientific session that evening will be Dr. Roger S. Mitchell of Denver, Colorado, whose subject will be "Acute Virus Respiratory Diseases."

Edmund B. Flink, M. D.

Dr. Edmund B. Flink of Morgantown, Professor and Chairman of the Department of Medicine, West Virginia University School of Medicine, will serve as moderator at the session on Tuesday morning, March 28, which will be devoted to a discussion of diagnostic problem cases from the University of Virginia School of Medicine and the Medical College of Virginia.

The moderators for the morning and afternoon sessions on Monday, March 27, will be Doctor Mitchell and Dr. Julia M. Jones of New York City. The morning session will consist of reports on "relapse" readmissions at Eastern North Carolina Sanitorium, and "treatment failure" cases at Piedmont Sanitorium in Burkeville, Virginia. The afternoon session will be devoted to a discussion of "steroid" treatment cases at the VA Hospital in Martinsburg.

Dr. Karl J. Myers of Philippi, president of the West Virginia Trudeau Society, has announced that state physicians interested in attending the conference should contact the West Virginia Tuberculosis and Health Association, P. O. Box 341, Charleston 22, West Virginia. Requests for room accommodations should be mailed directly to the Hotel Roanoke.

Drs. Ralph H. Nestmann and William L. Cooke of Charleston are members of the committee arranging the program.

'Highroad to Health'—New Radio Series

"Highroad to Health," a radio series produced by Lederle Laboratories with the cooperation of the American Medical Association, is now being offered to radio stations throughout the country.

The series consists of thirteen 15-minute programs and deals with the role of the family physician in handling common medical problems arising in a family setting.

Each program opens with a 10-minute dramatization of a health problem and its handling by a physician. This is followed by a five minute interview-discussion with a guest physician.

MLB Licenses 22 Physicians at Winter Meeting in Charleston

As the result of the examination held by the Medical Licensing Board in Charleston on January 12, 1961, the following physicians have been licensed to practice medicine in West Virginia:

Berlow, Abraham Joseph, Montgomery
Chan, Narciso, Huntington
Lambrechts, Marcel Ghislain, South Charleston
Morales, Alfonso, Welch
Santa Rita, Samuel Dayag, Mullens
Tapia-Ruano, Eduardo, Spencer
Vazquez, Joseph Gilberto, Man
Vazquez, Luis A., Wheeling
Weiler, Robert Richards, Wheeling

The following is a list of the physicians licensed by reciprocity:

Adams, John McLauchlin, Winchester, Virginia
Beckner, Thornton Arnold, Man
Birmingham, Daniel John, Bellaire, Ohio
Conn, Rex Boland, Jr., Morgantown
de Prume, Francois Jehin, Keyser
Evans, James Herbert, Jr., Oakland, Maryland
Fee, Norman Francis, Man
Gow, Robert Campbell, Elkins
Jankoska, Richard Lyle, Elkins
Kennedy, Fred Arnold, Hopemont
Mowlem, Albert, Clarksburg
Sexton, James Kermit, Whitesville
Tyminski, Henry Herman, Cedar Grove

The spring meeting of the Board will be held in Charleston on April 10, 1961.

Make Your Reservation Now!

Members of the West Virginia State Medical Association are urged to make reservations immediately for accommodations during the 94th Annual Meeting at The Greenbrier in White Sulphur Springs, August 24-26, 1961. Application forms for room reservations were enclosed in a bulletin mailed to each member last month. The completed forms should be mailed directly to the Reservation Manager, The Greenbrier, White Sulphur Springs, West Virginia.

New DPA Director Named By Governor Barron

W. Bernard Smith of Logan has been appointed by Governor W. W. Barron as Director of the Department of Public Assistance. He succeeds Thomas R. Egbert.

Mr. Smith received his A. B. degree from Marshall College and the degree of LL.B from Washington and Lee University. He practiced law in Logan until 1956, at which time he became affiliated with the State Tax Department as director of the inheritance tax division.

The new director served as an assistant attorney general during the entire four years that Governor Barron was attorney general, beginning in January, 1957. During that time, he was attorney for the Department of Public Assistance. In that capacity, he drafted legislation last year to implement the federal program for medical assistance to the aged.

Annual Conference of PH Association At Morgantown, May 10-12

The 37th Annual Conference of the Public Health Association will be held at the new WVU Medical Center in Morgantown, May 10-12, 1961.

The theme for the Conference will be "Health Mobilization—The Built-in Concept." The topic was thought to be appropriate and timely inasmuch as West Virginia is one of the few states designated for a pilot program to develop a model for the entire nation.

Dr. M. A. Viggiano, health officer for district No. 7, has been named general convention chairman. The co-chairmen are Dr. L. A. Dickerson of Charleston, Director of the State Department of Health's Division of Disease Control, and Dr. Samuel J. Hawkins, who has been assigned by the USPHS to West Virginia as program consultant in health mobilization.

Dr. Philip W. Johnson Named Head Of Fairmont Emergency Hosp.

Dr. Philip W. Johnson, Fairmont surgeon, has been appointed by Governor W. W. Barron as superintendent of Fairmont Emergency Hospital to succeed Dr. Carl J. Carter, also of Fairmont, resigned. The appointment was effective as of January 16, 1961.

Doctor Johnson was a former superintendent of the Hospital, serving in that capacity from January 1948 until February 1958, when he resigned and was succeeded by Doctor Carter.

New Business Manager at Hopemont

Former State Senator Henry J. McKinley of Elkins has been named by Institutions Commissioner Joseph E. Hodgson as business manager of Hopemont Sanitarium. He succeeds H. C. Holsinger.

Mr. McKinley served two terms as a member of the West Virginia Senate, and was former business manager of the Weston State Hospital.

Dr. Vincent W. Archer Receives Award

Dr. Vincent W. Archer of Charlottesville, Virginia, was named as the 1961 recipient of the Gold Medal awarded by the American College of Radiology. The presentation was made during special ceremonies at the Drake Hotel in Chicago on February 10.

The medal is awarded for "distinguished and extraordinary service to the American College of Radiology and the profession for which it stands."

Doctor Archer is a past president of the Medical Society of Virginia and is currently serving as a member of the AMA House of Delegates.

Annual AHA Meeting in October

The annual meeting of the American Heart Association will be held at the Americana Hotel in Bal Harbour, Florida, October 20-24. The deadline for submitting abstracts of papers to be presented at scientific sessions is May 15. Further information may be obtained by writing to the American Heart Association, 44 East 23rd Street, New York 10, New York.

The West Virginia Medical Journal

March, 1961 Vol. 57, No. 3

Pyelonephritis: General Clinical Considerations*

George A. Wolf, Jr., M. D.

The Author

- **George A. Wolf, Jr., M. D., Dean and Professor of Clinical Medicine, University of Vermont College of Medicine, Burlington, Vermont.**

We are fortunate today in having with us two men who are making original contributions to the complex subject under discussion. They have taken the time and the trouble to think long and hard about the disease and provide us with the opportunity of altering our own thinking and increasing our own knowledge concerning it. It is my lot to set the stage.

First, we must distinguish sharply between two aspects of pyelonephritis, the acute and the chronic, because although they probably are related, they vary greatly in the challenge they present.

Acute pyelonephritis is most common in females, may well be self-limited, is relatively easy to recognize when symptoms are produced and in itself is no great problem if we regard the comfort of the patient as the sole criterion of cure. Symptoms of the disease are familar to us and usually are made manifest by the rather sudden onset of fever, possibly chills, flank pain, dysuria and malaise. The disease has a tendency to cure itself from the symptomatic standpoint, which inclines us to credit various antibiotics with great powers and to admire our own therapeutic skill. Grateful patients too may result.

It is becoming increasingly evident, however, that our job is only half finished when the patient recovers. In the first place, we should, as in syphilis, be concerned with the bacteriologic cure and thus should not consider a patient cured until the bacteria count in urine cultures has fallen to insignificant levels after pus has disappeared from the urine. (A significant bacteriuria might be more than 100,000 pathogenic bacteria per milliliter of urine in the clean, voided specimen).[1]

Second, the careless use of antimicrobial agents can result in resistant strains of bacteria so that effecting a bacteriologic cure can become a major problem in itself. Consideration of the patient with acute pyelonephritis should take into account the reasons for the infection, although all of us would give thought to the possibility of another lesion in the urinary tract if the symptoms did not subside promptly. It is becoming clear that we should ask ourselves, why did the patient get the infection in the first place regardless of whether or not it ran a typical course and subsided with or without treatment? Is pregnancy involved? Is there urologic disease causing an obstruction in the urinary tract? Has there been instrumentation or urethral trauma? Lest we be accused of treating bacteria and not the patient and creating business for urologists, let us explore the relation of acute pyelonephritis to the disease in its chronic state.

Acute-to-Chronic Relation

A review of the structure and function of the urinary tract reveals that the urethra contains bacteria, but normally they occupy the distal part and stay there without producing inflammatory reaction unless someone or something starts pushing them back or interfering with the rather neat system of valves in the urinary tract which keep things moving out. Then there

*Presented before the first general scientific session of the 93rd Annual Meeting of the West Virginia State Medical Association at The Greenbrier in White Sulphur Springs, August 25, 1960.

Submitted to the Publication Committee, August 27, 1960.

is a large pool of urine which is a good culture medium in most circumstances. Although for many years there has been speculation concerning the method of transmission of infection from the lower to the upper urinary tract, it is probable that transmission is through the urine itself and that the lymphatics are involved secondarily, and that transmission by blood stream is not very important in the usual case unless relatively enormous numbers of bacteria reach the kidney. If one may assume that in the circumstances of obstruction or instrumentation the pool of urine contains significant numbers of pathogenic bacteria, the stage is set for infection in the kidney and urinary tract. Quantitative studies of bacteriuria, however, indicate that significant numbers of bacteria can exist without clinical infection in the kidney and probably without subclinical infection. If one considers that bordering on the renal pelvis there is a rather complicated organ which produces different chemicals in its different parts, i. e., the kidney, and that there is evidence that certain chemicals produced by the kidney can effect tissue resistance to infection, another factor must be taken into account. Some careful work by Beeson and his group[2] is provocative in this regard. These workers found that E. coli, most commonly found in urinary tract infections, can go many places in the body without doing harm or causing inflammation. They found also that trauma to the medulla of the kidney predisposes to infection by a given dose of E. coli while trauma to the cortex does not. Knowing that ammonia is produced in the medulla, they were able to increase chemically the ammonia content of the medulla and predispose to infection with E. coli by this means. They showed also that ammonia seriously interferes with tissue resistance by blocking the action of complement. Thus, altered tissue resistance plus bacteriuria in the area may be the key to the pyelonephritic infection.

Alteration and diminution in blood supply can certainly interfere with tissue resistance and, as well, interfere with the chemical activity of the kidney. Evidence by Kincaid-Smith[3] (I'm sure Dr. Hazard will touch on this) indicates that in acute pyelonephritis inflammation of the blood vessels often results in ischemic changes and in infarction with altered tissue resistance. This with recurrent bacteriuria provides the combination necessary to produce further kidney damage and it may be that this vicious cycle eventually results in chronic pyelonephritis with altered kidney function. In other words, the acute pyelonephritic infection may result in permanently altered tissue resistance in the kidney. In the presence of a pool of infected urine, clinical or subclinical episodes of further inflammation may occur which eventually will result in the extensively damaged chronic pyelonephritic kidney.

From the foregoing consideration, our problem of dealing with pyelonephritis becomes somewhat clearer although by no means easier. In the first place, it seems clear that the careless use of antibiotics with the production of resistant strains might, by so-called iatrogenic means, produce chronic bacteriuria.

Second, if the presence of significant bacteriuria is ignored in the presence of obstruction, following urethral instrumentation or an attack of acute pyelonephritis the stage may very well be set for the production of chronic pyelonephritis.

Finally, inasmuch as some diuretics interfere with the chemical processes in the kidney, diuretics should not be used indiscriminately. For example, it has been shown that Diamox (acetazolamide) can increase the renal vein ammonia level in certain circumstances.[4]

Beeson[2] long has felt that the catheter or other urethral instrument should be used with fine discrimination and, recently it has been shown that approximately 17 per cent of all patients admitted to a hospital had significant bacteriuria and that all of the group over fifty years of age who demonstrated significant bacteriuria had had urethral instrumentation in the past.[1] There is, thus, strong suggestive although not conclusive evidence that the prevention of chronic pyelonephritis may be a matter of maintaining bacteria-free urine in patients when pyelonephritis is a consideration. Of course, the catheter should be used when its use is indicated. The argument concerning its use is complicated by confusion between the two conditions, i. e., infection of the urinary tract and bacteriuria.[5]

Differential Diagnosis

At the point in the natural history of the disease when chronic pyelonephritis becomes manifest by the symptoms of diminished renal function, its differentiation from the kidney destroyed by chronic glomerulonephritis becomes difficult if not impossible. Once it is evident that renal function is impaired and the patient's history suggests that pyelonephritis exists different considerations enter the picture. Time does not permit a discussion of chronic renal failure but it is likely that the aim should be maintenance of metabolic balance not only for symptomatic relief but to improve the resistance of the kidney to further inflammation, and it would seem reasonable to attempt to achieve sterility of the urine and the urinary tract.

One must consider the existence of unilateral pyelonephritis with hypertension and the possible effect of nephrectomy on blood pressure. At best this condition probably is very uncommon and indeed some feel it does not exist. Aortography and unilateral comparison of urine flow and sodium output are useful but rather expert consideration is required before nephrectomy should be performed.[6]

In summary, experimental work has led to extensive reconsideration of the problems related to pyelonephritis,[7] and maintenance of the relative sterility of the urine is currently being considered as a major factor in the prevention of chronic pyelonephritis.

References

1. Kaitz, A. L. & Williams, E. J.: Bacteriuria and Urinary Tract Infections in Hospitalized Patients, New England J. Med. 262:425-430, 1960.
2. Beeson, P.: Presentation before New York Academy of Medicine (Feb.) 1960.
3. Kincaid-Smith, P.: Vascular Obstruction in Chronic Pyelonephritic Kidneys and Its Relation to Hypertension, Lancet, Dec. 17, 1955, pp. 1263-1269.
4. Owen, E. E., Tyor, M. P., Flanagan, J. F. & Berry, J. N.: The Kidney as a Source of Blood Ammonia in Patients with Liver Disease. The Effect of Acetazolamide. J. Clin. Investigation 39:288-294, 1960.
5. Prather, G. C. & Sears, B. R.: Pyelonephritis: In Defense of the Urethral Catheter, J. A. M. A. 170:1030-1035, 1959.
6. Endt, E. R., Kerr, W. K., Wilson, D. R. & Jawroski, Z. F.: The Diagnosis and Treatment of Renal Hypertension, Am. J. Med. 28:169-187, 1960.
7. Kleeman, C. R., Hewitt, W. L. & Guze, L. B.: Pyelonephritis, Medicine 39:3-116, 1960.

The Safe Car

For over ten years, we have been experimenting with ways to prevent injury to persons in a collision, and much of that time the public has suffered through television showings and newspaper accounts of the tests. People say, "There's that man again!" and quickly turn off their sets.

Ideas or inventions are usually viewed as notions or fads, and are expected by everyone to quit bothering after a short time and pass on. But if these ideas or notions depend upon the public for support, they must overcome the prejudice of originality; to do this, they must appear in a form which will assure understanding. . . .

Everyone is familiar with the problem of transporting eggs. They are now packaged in carboard or pressed paper holders, with widely separated compartments and with supporting areas touching each egg. However, if the cardboard carton is dropped flat on the floor, the eggs will break; but if the pressed paper holder is dropped in the same manner on the floor, most likely none will break. Thus two things are evident: first, the eggs must be held in place with a larger properly constructed contact area; and second, the impact to which they are subjected must be absorbed rather than rebounded.

This is what we are trying to do with people in automobiles. These two things, careful holding and proper absorbing, are necessary in order to keep people safe.

There is a tremendous incentive to package people in cars this way. According to Cornell University Crash Injury Research reports, more than one-half of the deaths and injuries in automobiles occur at a speed less than 40 miles per hour. This one-half would approximate 18,000 deaths, nearly 60,000 totally incapacitated, and about 1.4 million injured. These numbers are as big as they appear from the newspaper accounts every day. Actually, the human suffering and loss of life resulting from automobile accidents follows cancer and heart disease in extent, and the U. S. Public Health Service has declared automotive casualties to have reached epidemic proportions. Therefore, if people could be protected from injury for speeds up to 40 miles per hour, the lessening of injury and death would reduce the problem by approximately one-half. This result can be accomplished by the proper design of cars, if they are made to absorb the energy of collision up to 40 miles per hour without causing injury to people wearing seat belts.—John F. Briggs, M. D., and Arthur H. Wells, M. D., in Minnesota Medicine.

Pyelonephritis: Pathologic Aspects*†
(With Special Reference to Chronic Pyelonephritis)

John B. Hazard, M. D., and Margaret E. Einsel, B. A.

PYELONEPHRITIS may be acute or chronic and may occur with or without abscess formation. Chronic pyelonephritis usually is distinctly focal but may be disseminated; it is designated active or inactive, depending on the amount of inflammation present. A chronic but highly active lesion may represent recurrence of an acute episode and may be called chronic recurrent acute pyelonephritis. When there are few or no inflammatory cells in the pyelonephritic scar, the lesion often is classified as "old" or "healed" pyelonephritis.

Since the lesion of chronic pyelonephritis may be asymptomatic and the disease not clinically recognizable, it is especially important to define the criteria for pathologic diagnosis. This has been particularly true in recent years since needle biopsy has become so important in the evaluation of renal disease. The histologic changes are, briefly, a combination of the following features: tubular atrophy, cuff-like periglomerular fibrosis (Figure 1), groups of dilated tubules containing a dense eosin-staining, colloid-like material (Figure 2) and, frequently, interstitial infiltration by inflammatory cells (Figure 3). The arteries are thickened, particularly the intimal portions, and their lumens narrowed (Figure 4). There may be a relative increase in glomeruli in atrophic areas due to the diminution in tubular mass or a marked reduction of glomeruli as entire nephrons are lost. The pathologic aspects of pyelonephritis are well detailed by Weiss and Parker.[1]

An important differential diagnosis, sometimes difficult to distinguish from pyelonephritis, is that of renal atrophy due to arterial obstruction. Periglomerular fibrosis occurs less frequently in ischemic atrophy than in chronic pyelonephritis. "Colloid" filled tubules may be present but are not arranged in closely packed groups, and the involved tubules tend to be individual and elongated rather than clustered and round with flattened epithelium. Suppurative inflammation is not present in the interstitium in ischemic atrophy as it may be in chronic pyelonephritis, and thick-walled, stenotic vessels are not as prominent in the ischemic foci.

The Authors

- **John B. Hazard, M. D., Chairman of the Division of Pathology and Head of the Department of Anatomic Pathology, The Cleveland Clinic Foundation, Cleveland, Ohio.**
- **Margaret E. Einsel, B. A., Assistant in Anatomic Pathology, The Cleveland Clinic Foundation, and a student at the Western Reserve University School of Medicine.**

We propose to discuss some of the pathologic features and clinicopathologic correlations of pyelonephritis, particularly the chronic variety, as observed at autopsy and in a recent series of surgical specimens.

Material and Methods

Three-thousand consecutive autopsies occurring between the years 1946 and 1960 were reviewed. All cases with the pathologic diagnosis of pyelonephritis were restudied morphologically, and major clinicopathologic correlations were made.

In addition, the kidneys from 100 most recent and unselected autopsies from a consecutive series of 143 were studied by the step-block technique with detailed histologic study of white foci, which might indicate pyelonephritis.

The surgical pathologic review consisted of a study of the 50 cases in which nephrectomy had been performed and a diagnosis of pyelonephritis had been made.

Pathologic Findings

Of the 3000 consecutive autopsies, 167 (5.6 per cent) had a diagnosis of pyelonephritis. Of the 167, 43 (26 per cent) showed urinary obstruction, but in 124 (74 per cent) no obstruction was evident. In 74 (46 per cent) death was due to renal failure.

Of 167 cases, chronic pyelonephritis was a diagnosis in 118 (3.9 per cent); a detailed survey

*From the Department of Anatomic Pathology, The Cleveland Clinic Foundation, and The Frank E. Bunts Educational Institute, Cleveland, Ohio.

†Presented by Doctor Hazard before the first general scientific session of the 93rd Annual Meeting of the West Virginia State Medical Association at The Greenbrier in White Sulphur Springs, August 25, 1960.

Submitted to the Publication Committee, December 21, 1960.

was made of these. In 59 per cent of the cases, the patients were men, in 41 per cent, women. Fifty-eight (49 per cent) of the subjects were in the sixth and seventh decades of life; 7 were children. In 87 (74 per cent) of the autopsies, the disease was of bilateral distribution. The majority of the severely involved kidneys were atrophic and weighed less than 200 Gm. per pair.

Renal vascular sclerosis, grade 3 or 4 (on a 4-grade basis), was found in 70 per cent of the autopsies. It was generally most severe in the regions of scarring; approximately two-thirds showed a higher degree of vascular involvement in the pyelonephritic zone as compared with the remainder of the kidney. In disseminated pyelonephritis the vascular lesion was general and was estimated grade 3 or 4 in 82 per cent of the renal specimens. In addition to pyelonephritis, other renal disease was present in 23 of the 118 cases: 7 had a malignant nephrosclerosis; 3, chronic glomerulonephritis; 5, polycystic disease; 8, diabetic glomerulosclerosis. Three patients each had but one kidney. The heart was appreciably hypertrophied (weight 400 Gm. or more) in 78 (66 per cent) of the 118 subjects. In a control series of 200 autopsies in 1949 and in 1959, an average of 50.5 per cent had comparable heart weights.

In the series of kidneys from 100 recent autopsies in which step-blocking was carried out, pyelonephritis was present in 17, in one instance being acute and in 16 chronic. The routine autopsy reports for the same 100 autopsies recorded one instance of acute and 6 of chronic pyelonephritis. Chronic pyelonephritis was of significant degree in only one necropsy,

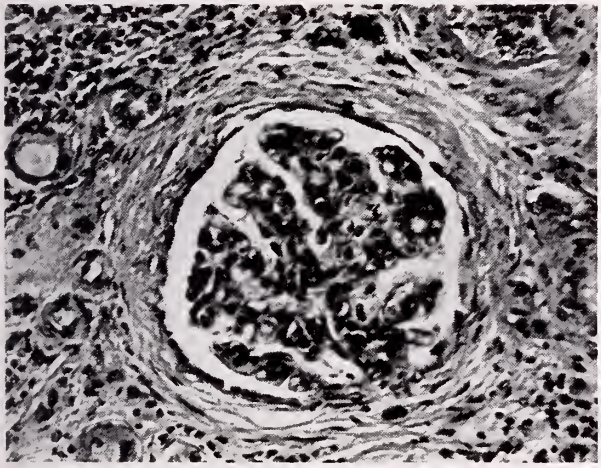


Figure 1

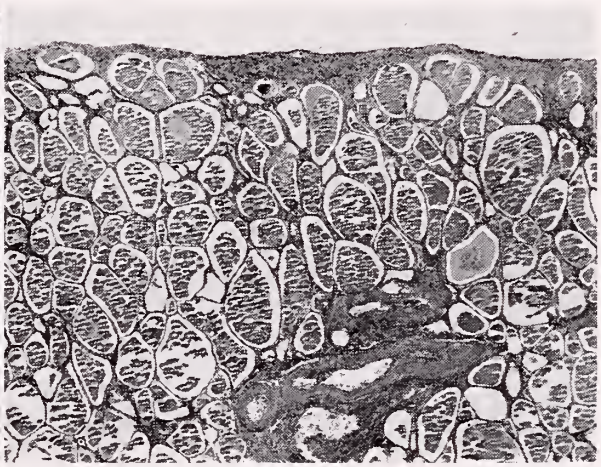


Figure 2

Figure 1. Cuff-like periglomerular fibrosis in chronic pyelonephritis. Hematoxylin-eosin-methylene blue. x 300.

Figure 2. Chronic pyelonephritis, inactive. Tubules severely dilated, filled with colloid-like material; thickening of artery walls; glomeruli absent. Hematoxylin-eosin-methylene blue. x 45.

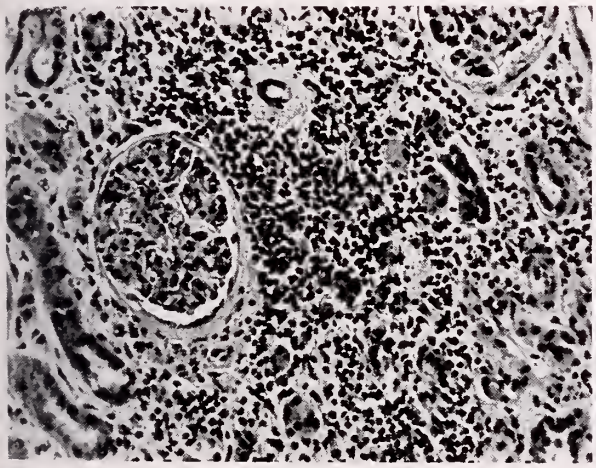


Figure 3

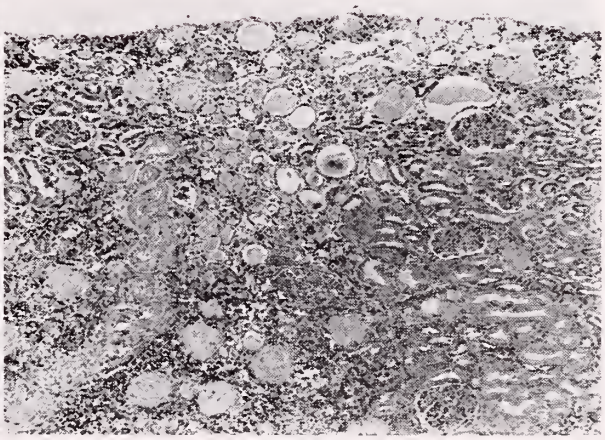


Figure 4

Figure 3. Chronic pyelonephritis, active. Interstitial inflammatory infiltrate (includes neutrophils) between atrophic tubules; slight periglomerular fibrosis. Hematoxylin-eosin-methylene blue. x 260.

Figure 4. Chronic pyelonephritis, active. Sclerosis of small arteries; colloid-distended tubules. Arterial thickening limited to zones of pyelonephritic involvement. Hematoxylin-eosin-methylene blue. x 65.

the lesion from the others (including the 10 additional cases found by step-block section) consisting of a few small pyelonephritic scars. The subjects were between 35 and 73 years of age; 11 were men, 5 were women.

In the surgical series of 50 patients, the kidneys in 23 revealed severe atrophic chronic pyelonephritis. In 24 patients there was calculous pyelonephritis. There were 19 men and 31 women; the age range was from 3 to 67 years. In 25 cases, the patients were in the fifth and six decades of life.

Clinicopathologic Correlations

Autopsy Series, 1946 to 1960.—Sixty of the 118 patients with chronic pyelonephritis had renal failure, with blood urea levels of 90 mg. per 100 ml., or above. In 40 patients (33 per cent), the diastolic blood pressure had been 100 mm. Hg. or more; in 78 (66 per cent), the heart weighed 400 Gm., or more.

Special consideration was given a group of cases with uncomplicated pyelonephritis, that is, where the disease was disseminated or focal, and unilateral or bilateral, but without urinary obstruction or other renal disease. Furthermore, because of the desire to compare heart weights, subjects were excluded who had congenital cardiac defects or any valvular disease. There were 46 adults and 3 children who met these conditions. In 32 subjects the kidneys showed extensive bilateral involvement, and death generally resulted from uremia. In 17 cases either unilateral or bilateral focal disease was found, but not of a severe grade.

The heart weight exceeded 400 Gm. in 27 of the 29 adults with bilateral severe chronic pyelonephritis. In the focal group, on the other hand, the heart exceeded this weight in only 7 of the 17 instances. Blood pressure findings could not always be correlated since some of the patients were admitted while in shock and coma. On the basis of the available evidence, however, the diastolic blood pressure reached 100 mm. Hg, or greater, in 17 of the 29 adults with extensive bilateral disease, but only 3 of the 17 with the less severe and focal disorder showed such an elevation.

Autopsy Series, Recent (100 Cases).—As noted previously, 16 of the 100 autopsies revealed chronic pyelonephritis. Thirteen showed only slight focal disease; in 2, moderate renal involvement without clinical significance was manifest; in 1, the cause of death was bilateral disseminated chronic pyelonephritis. In 8 subjects the heart weighed 400 Gm. or more. In one case the diastolic blood pressure was recorded as 100 mm. Hg or above, and in 6 cases as 90 mm. Hg or above.

Surgical Pathologic Series.—Sixteen of 50 patients (32 per cent) had diastolic blood pressure recordings of 100 mm. Hg or more. Nephrectomy to alter the hypertension rarely was performed, and complete evaluation of the cases in this respect was not attempted by us. It was noted, however, that 9 patients appeared to be unrelieved by nephrectomy; in 7 postoperative cases in which the patients were available, follow-up at the time of the study was too short for evaluation.

Discussion

The autopsy incidence of pyelonephritis has been reported variably from 1.6 per cent to as high as 20 per cent.[2-6] In the present study step-block sectioning revealed pyelonephritis in 17 of 100 autopsies as compared with 5.6 per cent for the entire series of 3,000. The additional lesions found by this special examination, however, consisted of a single focus or a few small foci of involvement, old and apparently without activity.

Disseminated Pyelonephritis

It is important to recognize the existence of an extensive and often disseminated form of pyelonephritis in addition to the more common distinctly focal variety. The type was recognized and described by Longcope,[7] both alone and in association with Winkenwerder.[8] In this severe form of pyelonephritis the loss of effective renal tissue is as significant as it is in chronic glomerulonephritis and may occur without apparent urinary obstruction. It also compares in frequency with chronic glomerulonephritis. In the present series of 3000 autopsies, disseminated severe bilateral pyelonephritis was found in 32 as compared with 29 necropsies on patients with chronic glomerulonephritis. The parenchymal changes are similar to those of chronic pyelonephritis generally, but the lesions are diffusely distributed and the kidneys more often are significantly reduced in size. The interstitial infiltrate may be mild, but there is notable interstitial scarring and broad patches of dilated tubules filled with colloid-like material. The arteries show severe thickening and sclerosis throughout. Thus, the resulting kidney has a pronounced reduction in functioning nephrons, and death occurs from renal failure, often accompanied by hypertension.

The distinctly focal form of chronic pyelonephritis is the variety most commonly encountered and is grossly evidenced by well-defined irregular surface depressions (Figure 5) frequently described as "U" shaped. The renal capsule often is thickened in the areas of involvement and strips with some difficulty. The sec-

tioned surfaces of the kidneys reveal areas of white color, often triangular in general shape, with the base of the triangle at the capsular surface. The involved area may be limited to the cortex or may extend from the cortex to the calyx. The cortical scarring, in particular, must be distinguished from that of vascular lesions and is best identified by the histologic criteria previously outlined. Both the ischemic and the infectional lesion may occur in the same kidney.

The vascular changes in human pyelonephritis are well recognized and may result from arteritis associated with the presumed earlier infection. These sclerotic vessels are similar to the vascular

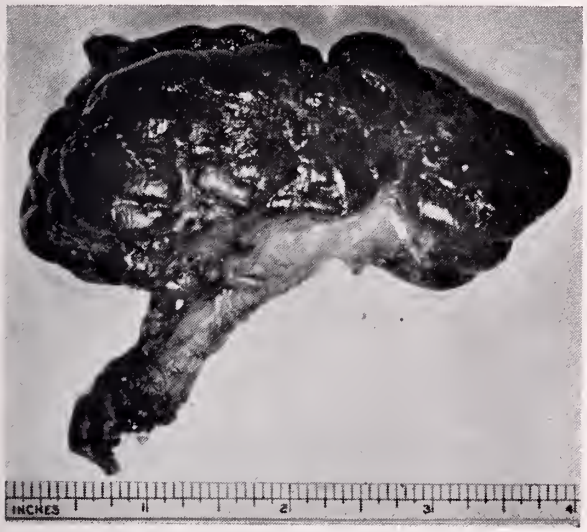


Figure 5. Chronic pyelonephritis. Focal areas of loss of renal parenchyma resulting in deep, irregular depressions.

lesions associated with foci of pulmonary tuberculosis. In the present study, the vessels within the focus of pyelonephritic involvement were generally more severely damaged than those in the nonpyelonephritic areas.

In the diffuse bilateral disorder the increased incidence of hypertension is understandable although the cause is not completely known. It is in the focal group that the relation to hypertension offers the greatest challenge, since the possibility of coincidental occurrence of the pyelonephritis with hypertension from another cause always exists.

In a study of chronic pyelonephritis, Kincaid-Smith[9] observed an association between hypertension and changes that she believed to be indicative of focal ischemic atrophy; no relation was observed between the colloid-like areas and increased blood pressure. Although the ischemic foci in pyelonephritis may result from the vascular disorder due to this disease, it is also possible that the pyelonephritis merely occurred in a kidney that was more susceptible to infection because of previous scarring due to vascular disease. Such ischemic foci, however, should be searched for since the stenotic vessels associated with chronic pyelonephritis might contribute to the formation of areas of focal atrophy. Hypertension could occur as a result of this vascular sclerosis or as an episode during the active phase of the disorder when inflammatory mural arterial involvement might produce a reduction of blood to renal tissue segments which are still sufficiently preserved and capable of producing pressor substances.

Malignant Nephrosclerosis: Alias or Entity

Saphir and Cohen[10] consider malignant nephrosclerosis a chronic form of pyelonephritis rather than a distinct morphologic entity. Difference of opinion exists, perhaps because chronic pyelonephritis consists of so varied a morphologic pattern. In malignant nephrosclerosis, as it is generally recognized, marked variation in involvement also is present, with interstitial fibrosis and mural thickening of small vessels that slightly resemble vessel changes in chronic pyelonephritis. Furthermore, it is difficult at times, as previously stated, to separate the atrophic changes due to ischemia from atrophic changes associated with pyelonephritis. The number of patients with malignant nephrosclerosis encountered in the present study was so small that the disorder did not offer an apparent problem. In the cases recorded as combinations of malignant nephrosclerosis and chronic pyelonephritis, "thyroid-like" foci were outstanding. No attempt was made herein to correlate the findings in the kidney directly with the established clinical diagnosis of malignant hypertension. Weiss and Parker[1] reported a 15 per cent to 20 per cent incidence of chronic pyelonephritis in the kidneys of patients with malignant hypertension. Saphir and Cohen,[10] in their published report, showed such apparent close correlation between malignant hypertension and "chronic pyelonephritis lenta" that further work concerning this relationship undoubtedly will be stimulated.

The relation of the underlying pathologic changes to uremia in the diffusely involved kidney is evident whether the lesion be acute with extensive suppuration or chronic with or without activity. Certain it is that the latter can produce bilateral renal disease that at some stage becomes irreversible and can cause death through renal failure just as surely as does chronic glomerulonephritis. Evidence of chronic renal infection may be minimal or absent, and the clinical diagnosis may not be made or even evident until uremia has occurred. In the presence

of obvious renal failure, the differential clinical diagnosis still may be difficult although functional studies relative to glomerular filtration and deficiencies in tubular function, along with renal biopsy, may serve to reveal the true nature of the underlying chronic disease. The diagnosis, however, may come too late to be of any value in treatment.

The pathogenesis of chronic pyelonephritis generally is accepted as infectional. Cultures of the urine, however, or even of the renal biopsy tissue, are not always positive in the presence of apparently active chronic pyelonephritis. Multiple cultures are necessary for assessment since positive findings may be sporadic. Kass[11] noted that the presence of positive urine cultures was somewhat proportional to the degree of activity of the renal lesion, judged histologically. Thus, in active, suppurative pyelonephritis, cultures were frequently positive; in the inactive or healed variety, however, they often were negative. Kleeman, Hewitt and Guze[12] suggest that altered proteins may be liberated from the infected kidney to serve as antigens in an autoimmune process which would lead to continued destruction of renal parenchyma.

Summary

1. Pyelonephritis was a diagnosis in 5.6 per cent of 3000 consecutive autopsies; in 3.9 per cent of the series, the lesion was classified as chronic. Chronic pyelonephritis was a major cause of death through renal failure in 60 cases (2 per cent of the entire autopsy series and 46 per cent of the number in which pyelonephritis was an autopsy diagnosis).

A special study, by step-block technique, of kidneys from 100 recent autopsies revealed a higher incidence of pyelonephritis than that observed when employing the usual autopsy procedure (17 per cent compared with 7 per cent), but did not serve to reveal additional instances of significant renal involvement.

2. Chronic bilateral pyelonephritis uncomplicated by other renal disease was present in 46 adults and 3 children; in 32 (29 adults and 3 children), it was severe and the major cause of death.

3. Indication of preceding hypertension through increased heart weight was present in 66 per cent of the subjects with pyelonephritis, and diastolic blood pressures of 100 mm. Hg or above had been recorded in 33 per cent. Twenty-seven of 29 adults (93 per cent) with severe bilateral disease had increased heart weight, and diastolic blood pressure recordings of 100 mm. Hg or above in 17 (59 per cent).

4. The lethal character of severe bilateral chronic pyelonephritis was reconfirmed by the study; slight local scarring did not appear to be of significance. The relation of chronic pyelonephritis to hypertension was not clarified further.

References

1. Weiss, S. & Parker, F., Jr.: Pyelonephritis: Its Relation to Vascular Lesions and to Arterial Hypertension, Medicine 18:221-315, 1939.
2. Bell, E. T.: Exudative Interstitial Nephritis (Pyelonephritis), Surgery 11:261-280, 1942.
3. Baumanis, J. & Russell, H. K.: Pyelonephritis in a Chronic Disease Hospital, Geriatrics 14:25-34, 1959.
4. Braasch, W. F. & Jacobson, C. E.: Chronic Bilateral Pyelonephritis and Hypertension, J. Urol. 44:571-579, 1940.
5. Brod, J.: Chronic Pyelonephritis, Lancet 1:973-981, 1956.
6. Jackson, G. G., Dallenbach, F. D. & Kipnis, G. P.: Symposium on Clinical Advances in Medicine: Pyelonephritis: Correlation of Clinical and Pathologic Observations in the Antibiotic Era. Med. Clin. North America 39:297-305, 1955.
7. Longcope, W. T.: Chronic Bilateral Pyelonephritis: Its Origin and Its Association with Hypertension. Ann. Int. Med. 11:149-163, 1937.
8. Longcope, W. T. & Winkenwerder, W. L.: Clinical Features of the Contracted Kidney Due to Pyelonephritis, Bull. Johns Hopkins Hosp. 53:255-287, 1933.
9. Kincaid-Smith, P.: Vascular Obstruction in Chronic Pyelonephritic Kidneys and Its Relation to Hypertension, Lancet 2:1263-1268, 1955.
10. Saphir, O. & Cohen, N. A.: Chronic Pyelonephritis Lenta and the "Malignant Phase of Hypertension," A. M. A. Arch. Int. Med. 104:748-762, 1959.
11. Kass, E. H.: Bacteriuria and the Pathogenesis of Pyelonephritis, Lab. Investigation 9:110-116, 1960.
12. Kleeman, C. R., Hewitt, W. & Guze, L. B.: Pyelonephritis, J. A. M. A. 173:257-259, 1960.

. . . don't accustom yourself to use big words for little matters.

SAMUEL JOHNSON.

Surgical Experience with Arteriosclerotic Occlusive Disease of the Aorta, Iliac And Femoropopliteal Arteries*

Alberto Adam, M. D., and James H. Walker, M. D.

The past ten years have brought radical surgical approaches to the treatment of arteriosclerotic occlusive disease of the terminal portion of the abdominal aorta, as well as of the iliac and femoral arteries. Improved methods of radiographic visualization of these vessels, availability of well established blood banks, and the advent of arterial substitutes have changed the surgical treatment from an indirect to a more aggressive and direct approach. The literature is replete with reports attesting to the validity of these procedures. Moreover, attempts are being made to standardize the methods in order to establish more definite criteria for the ultimate selectivity of patients requiring arterial substitutional treatment.

Extensive variations exist in the type and extent of the occlusive processes observed not only in the terminal aorta distal to the renal vessels, but its major iliac, femoral and popliteal branches. The variations range from the small, segmental type of block to the nonsegmental or diffuse type of occlusion by atheromatous plaques in various stages of evolution, and thrombosis. It is imperative, therefore, that in addition to the clinical signs and symptoms, adequate localization and extent of the occlusive lesions be determined prior to any rational approach in treatment.

No definite etiology as yet has been established as the cause of arteriosclerosis and its sequelae. Arterial substitution, therefore, remains within the realm of good, palliative surgery in occlusive disease processes. This philosophical approach establishes the necessity of accurately evaluating the individual's problem in order to avoid a poor selection of cases. Moreover, poor selection of cases will be conducive to an increase in the amputation, morbidity and mortality rates noted before the advent of arterial grafting. Prior to the present direct approaches, medical management and lumbar sympathectomy were the available methods for relief of arterial insufficiency. They still are of value when arteriographic and other medical complications contraindicate the modern techniques.

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Clinical Signs and Symptoms

The signs and symptoms associated with occlusive arterial processes of these major vessels are related directly to the type of segmental or diffuse obstructive process and to the site and the status of the collateral circulation present. The most typical symptom of insufficient arterial supply to the peripheral limbs is intermittent claudication; pain on exercising certain groups of muscles directly related to the main artery which supplies them. The pain therefore may be localized in the hip, the thigh, the calf or the foot and characteristically develops during walking and subsides or completely disappears at rest. In the more advanced stages of occlusion, the pain also may be present at rest. The pain varies from a dull ache to severity and sharpness, depending upon the deficit of blood and oxygen to the tissues upon demand, basal or at work. In addition to the above, blanching of the extremities, atrophy of the skin, loss of hair and temperature variations in the limbs confirm the diminution of arterial flow to the involved segments supplied by the obstructed vessel.

Physical examination in the majority of cases reveals unequivocally the presence of diminished or absent pulsations in the major vessels involved. Fortunately, the larger arterial trunks such as the aorta and arteries to the upper and lower limbs, are easily accessible to palpation. A fairly precise arterial review therefore can be obtained by a palpatory estimate of the pulses of these vessels. Oscillometry is an adjunct to the above.

*From the Department of Thoracic and Cardiovascular Surgery, Memorial Hospital, Charleston, West Virginia.
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Surgical treatment of arterial occlusive disease encompasses four definite paths, namely, arterial replacement, arterial by-pass grafting, thrombo-endarterectomy and sympathectomy. In choosing the appropriate method or combination of methods, an accurate picture of the pattern of the arterial involvement is necessary. Visualization by arteriography is therefore essential prior to the institution of treatment. To date, our experience is confined to a group of cases in which not only the clinical signs and symptoms are typical but, in addition, satisfactory arteriographic visualization has been accomplished to determine the most suitable method of treatment.

Arteriography

The decision to replace or by-pass occlusive disease of the aorta or major vessels is based upon detailed information obtained by aortograms or arteriograms. To date, over 175 such examinations have been performed with minimal morbidity and no mortality. If the arteriograms prove equivocal, repeat injections are made, varying the speed with which the dye is injected to ascertain the areas of occlusion as well as the area of so-called run-off. If the patient proves to have a segmental type of block in addition to a satisfactory distal run-off vessel and branches, arterial grafting or by-pass grafting is carried out, depending on the location, nature and extent of the lesion. It has been established that if the vessel distal to the occlusion is markedly decreased in diameter and involved in diffuse arteriosclerotic changes, the graft, by necessity, either immediately after surgery or in the near future, will be doomed to failure. On the other hand, the experience of others as well as ourselves has shown that if the distal run-off arteries and branches are of satisfactory caliber and structure, between 85 per cent and 90 per cent of the grafting procedures will be successful.

Additional useful information is gathered by arteriography. We make particular reference to the status of the collateral vessels in the event that the occlusive process involves the major as well as the run-off branches. In evaluating the status of the collaterals by arteriography, it has been our observation that in those cases in which the occlusion involves the major and distal run-off arteries but in which the collaterals are abundant, sympathectomy has protected the lower limbs from changes which are conducive to infection, ulceration and ultimate gangrene. We have, therefore, utilized the arteriogram not only as the basis of decision for or against arterial grafting, but also to predict to a large degree the results of sympathectomy. The latter procedure also has been used on occasion simultaneously with grafting operations when a vasospastic component also has been suspected or found in association with the major occlusive disease. Again, sympathectomy has been used alone in cases in which grafting is ruled impossible, with considerable relief of symptoms, diminution of pain, return of warmth and some increase in exercise tolerance to the lower extremities. While the concept that sympathectomy is of no value in the treatment of intermittent claudication alone, we have noted that when the major and run-off vessels have been extensively obliterated but abundant collaterals are present, sympathectomy has decreased the claudication pain, increased exercise tolerance, and prevented the development of maximal arterial deficit and ultimate gangrene for a longer period of time.

Types of Grafts

During the past three years, we have used exclusively one type of graft, namely, the unbleached teflon uncrimped tubes. Other popular substitutes are made of dacron, nylon, orlon and ivalon synthetics. In view of satisfactory results with the teflon tubes, we have not felt it necessary to change to other available prostheses.

In selecting our graft, we have used teflon tubes which usually are 2 to 2½ times the diameter of the host vessels. It is our feeling that in so doing, an adequate diameter will persist following the variable biological reaction to the graft material by the host tissues. Similar material has been employed without complications in the replacement of the terminal aorta and its bifurcation, aorto-iliac and aortofemoral, as well as femoropopliteal grafting operations. A three year follow-up in some of our cases has shown the stability of this synthetic and its definite place in vascular surgery. We have also employed thrombo-endarterectomy and arterial plastic repairs in a minimal group of patients and usually in association with our by-pass grafting procedures in which a plaque or an old organized thrombus is encountered, partially occluding a fairly normal appearing vessel.

Conclusions

(1) The treatment of major arteriosclerotic occlusive disease of the abdominal aorta below the renal arteries and its major branches by grafting is a definitely established surgical operation.

(2) Arteriography is one of the most important examinations available which confirms the subjective and physical findings, establishes

the status of these vessels and serves as a basis of decision for or against arterial graft substitution.

(3) Arteriography has served as a prognostic adjunct in cases not suitable for grafting but subjected to sympathectomy.

(4) Improper evaluation and selection of cases only increase the morbidity and mortality, as well as the amputation rate above those noted prior to the institution of arterial grafting methods.

(5) Teflon bifurcation and isolated tubes are safe and most useful synthetic prostheses in by-pass or arterial replacement therapy.

Spirit of Youth

The idea has been prevalent for some time that the human race, generation by generation, has been increasing in physical stature, although less can be said about other forms of expansion, as in social consciousness. Historical evidence has served to confirm the impression that medieval man was relatively puny. His modern counterpart can rarely crawl into the armor worn by the stoutest exponents of the art of chivalry, and regarding giants alleged to have once roamed the earth, as well as Paul Bunyan, the bearded Goliath of the backwoods, and John Henry, the cotton-rollin' roustabout who weighed in at 44 pounds the day he was born, these examples must be considered as the exception rather than the rule.

It has been left to the statisticians of the Metropolitan Life Insurance Company to prove by their own incontestable methods that the spirit of youth is now lodged in more stately mansions than before. This has been accomplished by the simple expedient of studying the weights and measurements collected as insurance figures over the past forty years and subjecting them to the heavy-lidded scrutiny of still another electric eye.

The results indicate that among boys fifteen to sixteen years of age height has increased an average of 1.8 inches and weight a matter of 10 pounds. The increase at ages seventeen to nineteen was nearly the same—1.6 inches and another 10 pounds. Girls have made a less spectacular record in these particulars. Among those fifteen to sixteen years old the average gain in height over that of two-score years ago was only 0.6 inch and 1.25 pounds; at seventeen to nineteen the forty-year increase in height gain was a mere 0.4 inch, and weight gain had actually dropped by 3 pounds.

At college age a fourth of the male students were, in the period 1948 to 1950, at least 6 feet tall, and more than a sixth of the female students were 5 feet and seven inches or over.

If, as Wordsworth claims, the child is father to the man, it appears that the situation is satisfactorily out of control, especially since the statisticians have concluded that the increased growth stimulus is at least partly the result of better nutrition, progress in medicine and public health, higher standards of living and "the attainment of physical maturity at a somewhat younger age, on the average, than in earlier generations." These conclusions, however, are in part matters of conjecture; a *post hoc* method of rationalization not ordinarily engaged in by statisticians.—The New England Journal of Medicine.

Management of Intestinal Obstruction*

Manuel E. Lichtenstein, M. D.

INTESTINAL obstruction is a condition in which interference with the forward movement of the intestinal contents occurs because of mechanical block. Causes for this may exist within the lumen (foreign body, gallstones), or arise from the bowel wall itself (tumor, diverticulum, inflammatory disease), or, the condition may result from external compression (band, hernial ring, adjacent inflammatory or neoplastic mass). A most serious complication or concomitant occurrence is impairment of the blood supply to the involved segment of bowel (strangulation obstruction).

Mesenteric vascular occlusion may occur without intestinal obstruction but it simulates strangulation obstruction so closely that the surgical treatment is essentially the same for both. Paralytic ileus due to a variety of causes may occur without occlusion of the intestinal lumen. The condition simulates, to some extent, mechanical intestinal obstruction; oftentimes it is a complication of the latter and in turn may precede acute mechanical obstruction. It must be distinguished from mechanical occlusion to avoid unnecessary surgery.

Thus, in dealing with intestinal obstruction, consideration must be given a variety of conditions in which the lumen of the bowel may be occluded or patent, the peristalsis effective or not, and the blood supply to the bowel adequate or inadequate, in whole or in part.

Prevention Sometimes Possible

Prevention of intestinal obstruction is possible in a large number of cases. Repair of inguinal, femoral, umbilical, ventral, epigastric and traumatic diaphragmatic hernia soon after detection will forestall strangulation obstruction in these respective locations.

Earlier diagnosis of obstructive lesions of the colon, before occlusion is complete, makes it possible to perform elective surgery without preliminary colostomy or procedures for circumvention of the nonremovable lesion. In addition, prevention of postoperative adhesions, evisceration and herniation by more carefully performed abdominal surgery will reduce materially the incidence of intestinal obstruction.

The mortality rate in strangulation obstruction also could be reduced by more prompt recognition of the condition, when present, and the consequent earlier surgical intervention.

The Role of Management

Management of intestinal obstruction must provide:

1. Surgical relief in strangulated hernia, greatly distended large bowel and persistent obstruction in small bowel with or without impending peritonitis, perforation or vascular impairment.

2. Progressive non-surgical care in acute inflammatory disease with the prospect of spontaneous recovery pending resolution of the inflammatory process, and in postoperative adhesions of recent origin.

3. Elective surgery for removal or circumvention of an obstructing lesion after the distention is relieved, the fluid and mineral balance corrected and the patient prepared for the necessary surgery.

The objective of management is restoration of continuity of the lumen together with return of active peristalsis to the bowel, with an adequate blood supply. The plan must be adapted to the cause of the condition and the severity of the illness. Details of management are based on an understanding of the physiological, pathological and mechanical disturbances which affect the patient systemically and locally.

Illness of the patient with acute intestinal obstruction varies in severity with the grade of obstruction (complete, incomplete), its duration, its level in the intestinal canal (high, intermediate, low) and the extent of vascular impairment in the involved segment of bowel, all of

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which factors determine the amount of fluid and mineral loss through vomiting or stagnation in the intestinal lumen, the degree of intestinal distention, the severity of toxemia and sepsis following gangrene (actual or impending) of the involved bowel, and the blood changes associated with hypohydration, mineral loss, alkalosis, uremia, sepsis and shock.

Level of Obstruction

Variation in the severity of symptoms commonly is due to variation in the level of obstruction. The gastrointestinal canal embryologically is divided into three segments: foregut, midgut and hindgut (Figure 1). Its entrance is the stomatodeum, its exit the proctodeum.

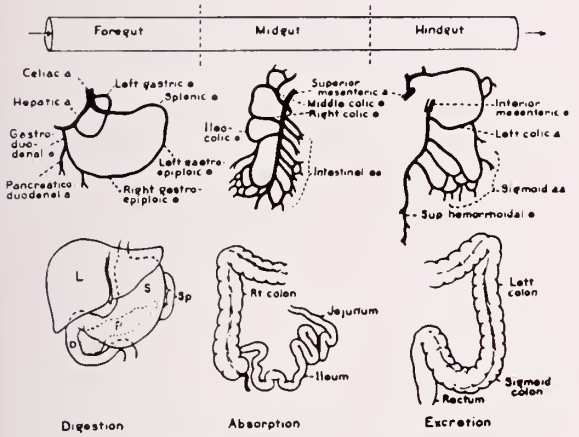

Figure 1. The three segments of the gastrointestinal canal (see text).

The foregut receives its blood supply from the coeliac axis, and the organs derived from this segment are associated in the function of digestion. The midgut is supplied by the superior mesenteric artery, and the portions of the intestinal canal derived from this segment are associated in the function of absorption. The hindgut receives its blood supply from the inferior mesenteric artery and this entire segment is concerned with elimination of unabsorbed residue.

The midgut itself has three segments which differ from each other anatomically and physiologically (Figure 2). Of the three, the jejunum is largest in caliber, with a thicker wall, while the mesentery contains less fat than the ileum. The jejunum has a more abundant blood supply in order to furnish the large volume of *succus entericus* which is necessary as a diluent for the concentrated foods received from the duodenum (Figure 3). Peristaltic activity is more rapid in the jejunum than in the ileum.

While fats are absorbed by the lacteals in the jejunum, the carbohydrates and proteins are reduced in concentration in this segment and are moved into the ileum where actual absorption takes place. The ileum is closely related in its development to the yolk sac which originally supplied nutriment to the embryo before placentation took over the function. When the yolk sac persists in whole or in part (Meckel's diverticulum), it is located in the ileal portion of the midgut. The amount of secretion into the ileum is relatively scant, but the absorptive activity here maintains the nutrition of the individual. Disease in this segment of the intestinal canal always is associated with a certain degree of malnutrition. The right half of the colon absorbs water and salts, and permits the passage of the unabsorbed residue into the left colon.

High Obstruction.—The variation in function of the segments of the intestinal canal suggests the clinical classification of intestinal obstruction (Figure 2). In high obstruction secretions are poured into the intestinal lumen in an area where absorption is minimal. Stagnation of the secretions will occur unless they are evacuated by vomiting or removed by suction through a tube. The degree of distention will vary, but swallowed air will be limited to the stomach and upper reaches of the small bowel.

Low Obstruction.—In low obstruction (left colon) food and secretions are absorbed in their passage through the entire midgut but the unabsorbed residue cannot be evacuated from the distal colon. Thus in high obstruction there is prompt loss of secretions from the intestinal canal and corresponding loss of essential constituents from the blood plasma, while in low obstruction nutrition of the patient is maintained, little change occurs in the chemistry of the blood, but colonic distention gradually develops and may reach a degree favoring perforation and peritonitis.

Intermediate Obstruction.—Intermediate obstruction is characterized both by vomiting and distention, but the degree of each is dependent on the proximity of the obstruction to the jejunum or to the left colon.

Diagnosis.—Time lost before medical aid is sought by the patient is indeed regrettable. There must be no further delay once medical management is instituted. Diagnostic and therapeutic measures must be carried out simultaneously. An analysis of the history of the patient's present illness, a careful physical examination,* and clinical laboratory and x-ray studies, all aid in establishing the diagnosis.

*The most common errors of omission are failure to recognize an incarcerated femoral hernia in the elderly female, and failure to detect and remove a fecal impaction.

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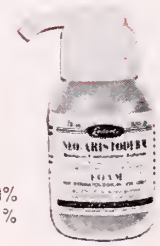

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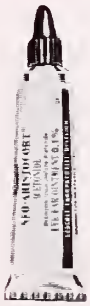

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Suspicion that intestinal obstruction is present is essential for an early diagnosis to insure proper management. Intermittent, cramp-like pain is characteristic of bowel obstruction in the absence of gastroenteritis or diarrhea from any cause, but this alone is not always a basis for the diagnosis. Incarcerated hernia must be looked for, and recognized when present. The presence of an abdominal wall scar is suggestive of post-operative adhesions as a cause. A scar of the chest wall should suggest an injury of the diaphragm. Incarceration of small bowel through an opening here may go unrecognized unless suspected.

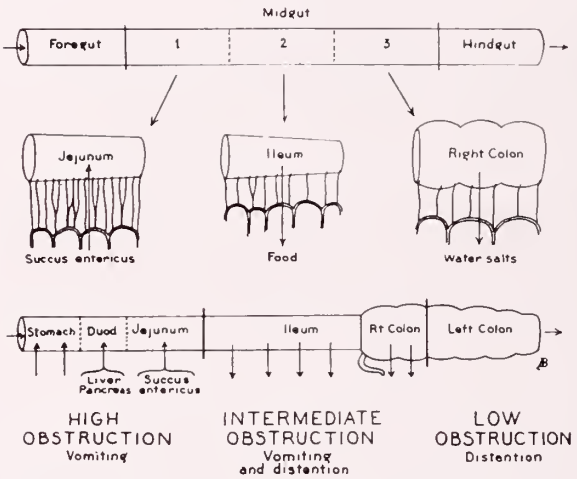
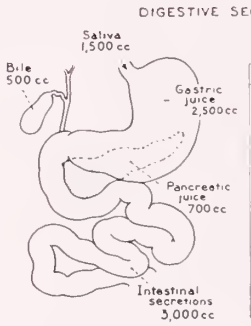


Figure 2. Clinical classification of intestinal obstruction. High, intermediate, low.



Secretion	Vol	NaCl
Saliva	1,500cc	7 gms
Bile	500cc	7 gms
Gastric juice	2,500cc	15 gms
Pancreatic juice	700cc	8 gms
Intestinal secretions	3,000cc	18 gms
	8,200cc	55 gms
Total plasma volume	3,500cc	23 gms

Figure 3. Secretions into the gastrointestinal canal are derived from the blood stream. Homeostasis is possible while the hemogastroenteric circulation is active. Loss of secretions from the intestinal canal is responsible for shrinkage in circulating blood volume, hemoconcentration and the loss of electrolytes and those agents which alter the PH of the blood.

Small bowel strangulation in the peritoneal cavity is characterized by severe, steady pain usually with evidence of peritoneal irritation, sepsis or shock. In long-standing simple obstruction, however, involving long segments of bowel which cannot be emptied by vomiting, the blood supply becomes impaired because of the increased intraluminal pressure. Thus a simple obstruction of long duration may become, in fact, the equivalent of a strangulation obstruction and require immediate surgical relief.

Large bowel obstruction in the colon usually has a long period of development. A carefully elicited history will reveal evidence of neoplasm or inflammatory disease. Distention usually is marked but in the presence of an incompetent ileocecal valve the distention will involve the small bowel too. The dangers of persistent marked distention are interference with descent of the diaphragm and perforation at the cecum. In elderly individuals a reduced respiratory excursion decreases the intake of oxygen and reduces the volume of the pulmonary circulation. Anoxia thus acquired is detrimental to cerebral activity but the stagnation of secretions in the lungs favors pneumonitis which frequently is fatal.

Roentgenology.—X-ray studies, as stated previously, are aids to diagnosis and guides for proper treatment. (a) Scout films. Anterior-posterior views of the abdomen including the thoracic and pelvic diaphragms taken in the horizontal position to show the bowel pattern will distinguish small from large bowel obstruction and both from paralytic ileus; similar views in the vertical or lateral position show fluid levels which help to localize the site of obstruction (Figure 4). (b) A barium enema administered under fluoroscopic control helps to determine the level of a colonic obstruction, volvulus or intussusception. (Note: When the barium has outlined the level of obstruction, pressure should be discontinued to avoid accumulation of barium above the obstructing lesion.) In ileocecal intussusception, reduction of the ileum may be accomplished and laparotomy avoided, but further observation is necessary to determine the permanence of reduction. Barium should not be given by mouth to any patient who is suspect for bowel obstruction.

Rectal Examination.—Sigmoidoscopic examination is useful to detect or rule out lesions in the lower segment of the colon above the reach of the examining finger. Passage of a well lubricated tube into the lumen of the bowel above the site of a rectal or rectosigmoidal obstruction may relieve distention and permit better preparation of the patient for elective surgery. In volvulus, complete relief from distention may be obtained in some instances.

Clinical Laboratory Studies. Table 1.—Examinations of the blood are made for determination of those constituents which reflect the clinical aspects of the patient's condition. The initial study serves as basis of comparison with subse-

quent determinations in a study of the progress of the patient's condition.

Laboratory data must be interpreted in the light of the clinical history and an understanding of the basic disturbance as noted previously. The reliability of a laboratory examination depends on the handling of the blood sample drawn for the purpose and the accuracy of the technical procedures employed. Blood drawn to determine electrolyte levels while the patient is receiving the same electrolytes through another vein cannot give reliable information as to the body resources of these elements and the homeostatic levels in the circulatory blood stream. Laboratory data are of value in estimating the degree of anemia, hemoconcentration, infection and the chemical disturbances that require therapy.

Fluid Requirements.—The fluids to be administered must replace qualitatively and quantitatively those lost from the circulating blood (Figure 5) through vomiting, stagnation in the intestinal canal, renal excretions, perspiration and evaporation from the lungs. Essential foods and whole blood must be provided in chronic cases to aid in improving the preoperative status of the patient (Table II). The speed of administration of intravenous fluids should not exceed 250 cc per hour.

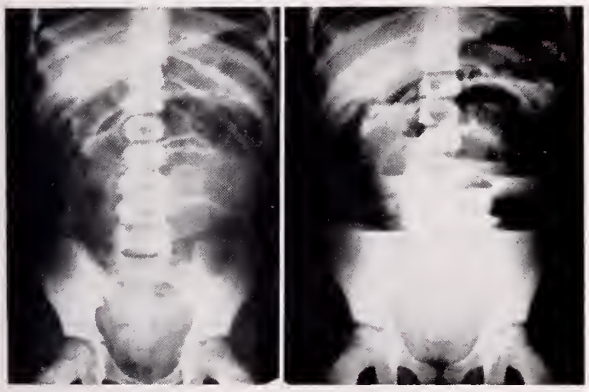


Figure 4. Left: A-P view in the horizontal position. Note small bowel pattern. Right: A-P view in the vertical position. Note fluid levels. Obstruction due to postoperative band following appendectomy.

Adequate urinary output is essential and 1000 to 1500 cc. of urine of specific gravity 1.010-1.020 should be maintained daily.

Decompression.—In small bowel obstruction, nasogastric intubation with suction by means of a Levin tube usually is effective. In some instances of obstruction in the distal small intestine, a Cantor tube or any of the modifications of the Miller-Abbott tube may rid the bowel of stagnant secretions more effectively and hasten preparation of the patient for abdominal exploration. When obstruction is not relieved, however, and strangulation or perforation is evident, laparotomy should be done regardless of distention.

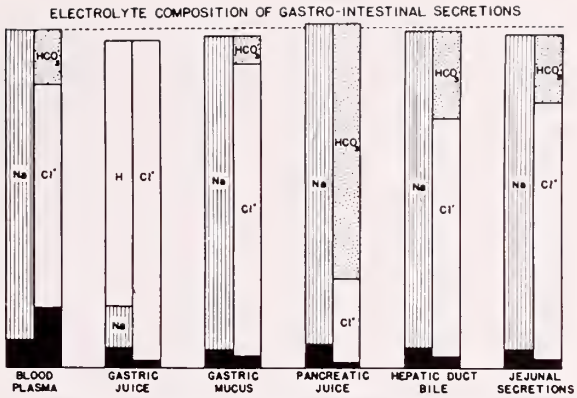


Figure 5. Gamblegram. Gastrointestinal loss represents loss from the blood stream and indicates the need for replacement therapy.

Urgent decompression of the small bowel is effected at laparotomy by isolation of a single distended loop, insertion of a suction tube or large catheter held in place with a pursestring suture and removal of the gaseous and liquid content by suction (Figure 6). The ileostomy or jejunostomy is temporary. Following release of the obstructing band or removal of the involved bowel with restoration of continuity of the lumen, the tube or catheter is removed and the opening in the bowel closed by suture. Decompression by this means facilitates closure of the abdominal wall.

Simple (nonstrangulation) intestinal obstruction does not always require urgent relief by surgical means. In many instances obstruction has been overcome following a period of planned management designed to correct the effects of vomiting and to decompress the intestinal canal. Such planned management has been called conservative therapy, but it is not opposed to surgery when the latter is indicated. Obstruction which accompanies or follows acute inflammation within the abdomen may be relieved by treatment directed toward overcoming the inflammatory process. The use of antimicrobial drugs, intravenous infusions of blood, solutions of dextrose, proteins and minerals and the occasional drainage of an abscess frequently relieves obstruction.

Adhesions following one or more abdominal operations often are the cause of obstruction. A period of conservative management may bring about complete relief, thereby avoiding more adhesions from another operation. In some instances of obstruction due to benign or malignant

neoplasm or chronic inflammatory disease, using the same conservative means, complete obstruction in a sick patient may be converted into an incomplete obstruction and bring about improvement in the patient's condition before corrective surgery is undertaken; in other instances, sufficient improvement may occur to permit preparation of the patient for what may be an extensive or prolonged operation in spite of the persistence of the complete obstruction.

Thus, conservative management of simple intestinal obstruction is a means of preparing the patient for the surgical relief of obstruction when such is found to be necessary. The time required for successful conservative therapy is not important so long as satisfactory progress is being made. Persistence, however, in this form of management without evidence of improvement, such as deflation of the bowel with a return of normal peristalsis, is hazardous and surgery must not be deferred. Conservative management must not be confused with neglected or delayed management in which procrastination with suction and intravenous fluids favors disabling complications or death.

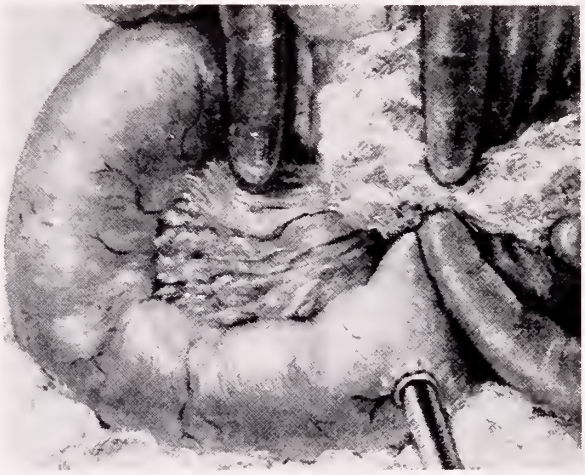


Figure 6. Urgent decompression. The ileostomy or jejunostomy is temporary. When decompression is effected, the tube is removed and the opening into the bowel closed by suture (From Ochsner).

Treatment Directed Toward Spontaneous Recovery

Conversion of an acute, complete obstruction into an incomplete or subsiding obstruction is effected by correction of the factors noted previously and by use of the "oil and enema routine" as follows:

1. Decompression of distended bowel by nasogastric intubation and suction is continuous for 24 to 48 hours.

2. Intravenous fluids appropriate in amount and in composition are administered to correct all fluid and mineral deficiencies (Tables 1 and 2).

Table 1

CLINICAL LABORATORY STUDIES

1. Blood chemistry: Na, K, Cl, CO_2, NPN, total proteins, blood albumin and blood sugar.
2. Blood count: Hb., Hct., WBC and differential.
3. Urine analysis: Albumin, sugar, bile, blood, specific gravity, chemical reaction, sediment.

CHART OF NORMAL VALUES

Na.	136-145 mEq.	Tot. prot.	6-8 Gm./100 cc.
K	4.1-5.2 "	Alb.	3.6-5.6 Gm./100 cc.
Cl	100-106 "	Sugar	80-120 mg./100 cc.
CO_2	24-34 "	Hct.	37-42
NPN	25-35 Mg./100 cc.	Hb.	13.5-15 Gm./100 cc.

Table 2

1. Water is supplied by the use of 5 per cent dextrose solution. To this may be added minerals known to be in deficiency as determined by evaluation of the clinical history or by the blood chemistry studies.
2. NaCl is supplied by 0.9 per cent NaCl in 5 per cent dextrose solution.
3. Replacement of fluids lost from the gastrointestinal canal by suction is supplied by 0.45 per cent NaCl in 5 per cent dextrose solution. (This is one-half strength of the isotonic NaCl solution.)
4. Chloride without sodium deficiency is corrected by the use of 4.5 Gm. NH_4Cl in 1000 cc. of 5 per cent dextrose solution repeated as often as needed.
5. Sodium without chloride deficiency is corrected by the use of 60 cc. molar sodium lactate in 1000 cc. of 5 per cent dextrose solution repeated as often as needed.
6. Potassium deficiency is corrected by the use of 3 Gm. KCL in 1000 cc. of 5 per cent dextrose solution repeated as often as needed.
7. Acidosis is corrected with lactated Ringer's solution.
8. Alkalosis is corrected with sodium chloride and potassium chloride solutions.
9. Proteins are supplied by solutions of protein hydrolysate, Amigen, Aminosol, human albumin.
10. Fats (for calories) are suplied by Lipomul (900 calories in 500 cc. of emulsion).
11. Whole blood is given for anemia due to losses from ulcerated lesions in the intestinal canal, in shock associated with strangulated bowel, and to restore blood volume when deficiency of this fluid is noted.
12. Soluble vitamins and antibiotics are added to fluids as required.

3. In the absence of evidence of strangulation, mineral oil (1 ounce) is given by mouth every 4 hours for 3 doses. Suction is discontinued for 2 hours after each dose. A record is kept of the amount of oil removed after the two-hour period.

4. A 2-quart, warm, tap water enema is given 4 hours after the last dose of oil. The washings from the colon are examined for oil and feces.

The presence of oil in the washings indicates absence of blockage and a good prospect for relief. The absence of oil in the washings indicates persistence of the obstruction and the need for further care. Reëvaluation of all factors must be made. In the absence of signs of strangulation,

volvulus or perforation, additional time may be spent in use of the treatment outlined.

5. Continue suction and intravenous fluids. Check blood chemistry and correct mineral and blood deficiencies, especially in potassium, proteins and whole blood. In ileus from pelvic inflammatory disease or early in the postoperative period effective antimicrobial drugs are continued.

6. Repeat step 4 in 8 hours. (Note: Oil is not repeated after the third dose in #3 unless most of the 3 ounces of oil was recovered by the intermittent suction of the gastric content.

It is essential to distinguish between ileus involving both small and large bowel with no occlusion of the lumen, in which delay favors recovery, and small bowel obstruction which fails to yield to conservative therapy.

Clinical Course.—Continuous observation of the patient's progress and the local condition of the bowel will determine the effectiveness of therapy or the urgency of the need for surgical relief. Recognition of the changing clinical condition for better or worse is an essential guide to treatment. In small bowel obstruction, development of abdominal tenderness usually is a sign of peritoneal irritation from strangulation, with gangrene or impending perforation. Also the sudden or gradual cessation of bowel sounds when these previously were active is evidence of paralysis of the musculature with inability to overcome the obstruction. These are indications for operative intervention.

In the absence of these indications preparation of the patient should be continued until restoration of the fluid and mineral balance is accomplished.

In simple obstruction of short duration such as an incarcerated external hernia, treatment should be undertaken promptly, without a long period of preoperative preparation.

In large bowel obstruction, cecostomy is most effective when marked distention is unrelieved by enemas or by attempted intubation from below. The cecum must be exteriorized to provide a large opening for evacuation of gas and feces. The tube cecostomy should not be used, for it does not provide an opening large enough for complete decompression and evacuation of the large bowel contents. The use of nasogastric suction rarely is successful in large bowel distention, and time should not be lost in a prolonged effort to decompress markedly distended large bowel by this method.

Loop colostomy in the right transverse colon is preferred to cecostomy by some surgeons for large bowel decompression. This is also satisfactory when the cause of the obstruction can be removed subsequently and continuity of the bowel restored without difficulty.

Volvulus of the sigmoid unrelieved by intubation from below is exteriorized and the involved bowel resected. When continuity cannot be restored immediately, the proximal and distal segments of viable bowel are united to form a spur, and a double-barreled colostomy is established. This is closed as soon as circumstances allow.

Intussusception unrelieved by enema is reduced at laparotomy. When reduction cannot be done and colon resection is too hazardous for the patient, anastomosis between the proximal and distal segments of bowel will relieve the obstruction. When gangrene involves the entire segment, exteriorization with lateral anastomosis between the viable proximal and distal bowel is done. The dead bowel is amputated, leaving a colostomy. This is closed when circumstances are favorable.

Operative Therapy.—Local anesthesia should be employed whenever possible, more especially for the release of an external hernia and for colonic decompression. General anesthesia offering a high degree of oxygen should be used with tracheal intubation when more extensive surgery is required.

The incision should be large enough to expose the site of obstruction. Its position will be determined by that of the obstruction as noted in the x-ray study or will be directly over the tender spot, when this evidence of impending perforation is present. A right paramedian incision usually will expose all of the small bowel.

Viability of bowel is determined by observation of its color, pulsation, response to oxygen inhalation and local stimulation. When doubt exists as to viability, the involved segment should be resected.

The peritoneum and posterior sheath of the rectus muscle are closed with a continuous chromic catgut suture, size #00, using a double strand; the anterior sheath of the rectus muscle is closed with interrupted non-absorbable sutures (silk, cotton but, preferably, 30 gauge wire) and the skin is closed with 35 gauge wire.

Ambulation is allowed early in the postoperative period.

Postoperative therapy is designed to prevent recurrence of obstruction by use of a bland diet. Mineral oil is useful to maintain a free passage of flatus and feces.

Summary

1. Intestinal obstruction is for the most part preventable. Since incarcerated hernia, colonic lesions and postoperative adhesions account for most of the cases, an effort to detect and repair hernias, diagnose and remove, adequately, colonic lesions early and to exercise greater care in the performance of abdominal surgery will reduce the incidence of this condition.

2. The intensity of therapy is dependent on the duration and the level of obstruction in the intestinal canal and the presence of infection, anemia or renal disturbances.

3. The relation between the blood plasma and loss of fluids from the intestinal canal by vomiting, suction, stagnation in the intestinal canal and the loss of food intake must be appreciated. Restoration of water, proteins, electrolytes, cells and other essentials to the circulating blood in adequate volume is necessary for survival of the patient.

4. Distention must be prevented but when present, overcome, to avoid its effect locally in the bowel (perforation) and systemically by interfering with respiration and the pulmonary circulation.

5. Strangulation is fatal unless recognized early and the dead segment of bowel removed from th peritoneal cavity.

6. Mesenteric vascular occlusion and paralytic ileus must be included in a discussion of bowel obstruction for treatment of the former requires surgical exploration and treatment of the latter may require in some instances, surgical intervention.

7. Intestinal obstruction may occur at any age but at both extremes it is fatal unless recognized and promptly corrected.

Doctors and Death

Despite our best efforts we can only stay death by a few decades, a few years, or for an even shorter time. All of our patients die eventually, but as the unknown Yankee soldier put it, "the difference between dying today and dying tomorrow is not much, but we all prefer tomorrow." Shakespeare put it another way, "Be absolute for death, either death or life will thereby be the sweeter."

Perhaps we are becoming more squeamish about death than our medical forebears for whom it was a frequent and inevitable happening. Death is undoubtedly becoming cleaner, more anonymous and less painful. It is indeed in danger of developing a certain horrific and fatuous hygienity, such as Aldous Huxley depicted in his "Brave New World."

When I visited Forest Lawns, the great cemetery in Los Angeles, I was told of a sardonic visitor who commented as he surveyed those broad acres filled with bad statuary, sentiment and soft music, exuding an atmosphere of general syrupy cheerfulness, "Death, here is thy sting!" Death and dying cannot be shrugged off or put to one side. As medical men we cannot evade the issues, and indeed we seldom attempt to do so, but not infrequently we pass by a little to the other side.

Awareness of and preoccupation with death has played a great part in human affairs; some of our finest buildings, from the pyramids to the Taj Mahal, have been inspired by death, and so have many of the greatest poems and epics. Whole sciences have developed in attempts to delay, further, or forestall it. Death is inescapable and there are never any easy answers for it. The busy doctor works out some rules for himself over the years, and with the common sense which his kind usually shows, he probably makes fewer mistakes than most. The family doctor is, or certainly should be, best able to tell the patient and his family that death is coming.—H. O. in Canadian Medical Association Journal.

Iron Metabolism and the Anemias of Pregnancy*

John L. McKelvey, M. D.

Studies carried out in recent years have done much toward answering the questions which hung over many of the problems of human anemias. Much more is known of the hereditary factors concerned. New biochemical tools, the use of radioactive iron as a tracer material for studies and the carefully controlled study of adequate numbers of patients, all have added to available knowledge. In particular, knowledge of details involved in the understanding of the anemias which are specific to pregnancy has made rapid strides. Much of this is due to the work of my erstwhile colleague, Dr. Roy G. Holly. The material presented here is largely a summary of his studies.

This paper, for obvious reasons, will be pretty much limited to consideration of these anemias specific to or very common in pregnancy. It must be clearly understood that the pregnant woman rarely may be smitten by other forms of anemia which occur in the non-pregnant woman as well. This must be considered in the practical work-up of the anemic pregnant woman.

It is time that the modern information be applied in the practice of obstetrics. The confusion at present is manifested by the use of inept terms to describe the conditions, inadequate work-up for diagnosis, inadequate therapy and incomplete understanding of the problem, as manifested by the use of expensive "shotgun therapy" with nonspecific and unnecessary drugs. A plea is made here for simple understanding of the problems concerned, clear-cut diagnostic procedures and specific therapy.

Iron Deficiency Anemias of Pregnancy

Before proceeding to a consideration of the pathologic states, it is necessary that agreement be reached on the normal metabolism of iron, the problems which are encountered in the usual female, and the features which are introduced by pregnancy. Unfortunately, it will be necessary to ask the reader to remember some numbers.

There is much that still is not known about the mechanisms, controls and abnormalities of iron absorption in the human. For a detailed consideration of this and relative literature, the reader is referred to an excellent summary by Hugh W. Josephs in the journal *Blood*, Vol. 13, No. 1, January, 1958.

The Author

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In this part of the world, an average daily diet contains 10-15 mg. of iron in organic form. Only that which is soluble is available for use and only 5-15 per cent of the total is absorbed. This is absorbed as the bivalent or ferrous iron. Thus 0.5 to 1.0 mg. of iron is absorbed each day by the normal person. Even in the presence of an iron deficiency anemia and with the therapeutic exhibition of ferrous iron by mouth, it is unusual for more than 5 mg. a day to be absorbed. Large doses of ferrous iron or gastrointestinal disturbances resulting from this treatment apparently can seriously interfere with the absorption of even this much.

Iron is excreted almost entirely by the kidney, with a little in perspiration. The kidney is limited to a maximal excretion of approximately 1 mg. in 24 hours. The absorption then must be strictly limited to that required for hemoglobin formation and for storage plus this small excretion. When this control of absorption breaks down, hemochromatosis results. The mechanism of this absorption and its control are not presently understood.

Body's Normal Iron Content

The normal iron content of the body is made up of about 3 Gm. in the hemoglobin mass, about 1 Gm. stored in the liver, spleen and bone marrow and about 0.2 Gm. elsewhere. If iron stores are saturated, then, about 1,000 mg. are available from here to meet emergency needs of hemoglobin formation. When these stores are depleted, the order of the problem of replacement by the administration of iron by mouth or from organic food sources is clear from what has been stated above.

An iron deficiency may be the result of deficient nutrition, of some interference with absorption (about which very little is known), of the

*Presented before the Fifth Annual Potomac-Shenandoah Valley Postgraduate Institute at Martinsburg, W. Va., October 23, 1960.

Submitted to the Publication Committee, September 29, 1960.

removal associated with pregnancy, or of blood loss. Blood contains something on the order of 0.5 mg. of iron per cubic milliliter. This figure should be kept in mind in relation to the iron absorption possibilities just discussed and to the menstrual and pregnancy blood losses to be discussed presently.

Bone Marrow and Functional Tools

Two other concepts are useful in considering the problems at hand. Given the tools, production of hemoglobin is a job at which the bone marrow is remarkably efficient. The required tools are adequate protein, iron and the accessory substances such as vitamin B_{12} and folic or folinic acid. Thus, increase in blood volume, as occurs in pregnancy, will be accompanied by normal hemoglobin values if the tools are available.

Next, in the presence of a demand for hemoglobin formation, absorbed iron is delivered selectively to the bone marrow first, until that demand is satisfied. Only then will it be delivered to depleted storage depots. Thus, the presence of a reasonably normal hemoglobin value does not necessarily mean that the depleted iron stores are back to normal. The significance of this fact in the treatment of iron deficiency anemias before and after pregnancy, following blood loss and in the case of the woman in the reproductive years who has given blood as a donor, is obvious.

Now let us look at the circumstances which are present in the non-pregnant female in the reproductive years and at her pregnant sister. Table 1 shows the values obtained by Holly from our own nurses and technicians.

Table 1

NORMAL MEAN VALUES FOR FEMALES (HOLLY)

	Nonpregnant	*"Normal" pregnant 8th month—untreated*	*Arbitrary borderline values for anemia*
Hemoglobin	13.4 Gm. %	11.9	12.0-12.5
Hematocrit	41.5 volume %	36.4	34.0
Serum iron	103 gamma %	63.0	60.0

The normal male, in the absence of blood loss, has a hemoglobin level of 14.5-15.0 Gm. per cent, with corresponding levels of hematocrit and serum iron. The normal non-pregnant female with her lower values is relatively iron deficient and one can understand this in the light of what has been pointed out. She is normally losing something approximating 50 Mg. of Iron (100 c. ml. of blood) monthly through menstruation and is kept busy making this up from organic food stores. Many will have more or less depleted iron stores. This is evident from the fact that following the administration of iron as the ferrous salt, the hemoglobin, serum iron and hematocrit will rise to equal those of the male. Only iron is needed to accomplish this.

Thus, a considerable proportion of women enter pregnancy with a relative iron deficiency. In Table 1, the mean values of so-called normal pregnant women in the eighth month of pregnancy are listed. Patients with iron deficiency anemias and hemoglobin levels of less than 10 Gm. per cent were excluded. The normal women have not been able to keep up with the iron demands of pregnancy, either by increased absorption or from their iron stores. Table 2 lists the pregnancy requirements for iron.

Table 2

PREGNANCY IRON DEMAND

Fetus and placenta	400-500 mg. iron
Increased blood volume	250-400 mg. iron
Delivery and postpartum blood loss	200-300 mg. iron
Total	850-1200 mg. iron

Not all of this is lost since the increased blood volume returns to normal at the end of pregnancy and postpartum. It should be noted also that the iron demand is not evenly spaced over the duration of the pregnancy but is very largely in the last half or third of it. There are a number of other factors operative such as the cessation of menstrual blood loss and the frequent interference with adequate food intake in early pregnancy. Broadly speaking, the problem is the relation between available iron and iron demand.

Physiologic Anemia of Pregnancy a Misnomer

The end result has been described as the physiologic anemia of pregnancy and ascribed to the increased blood volume of pregnancy with its disproportionate increase in the fluid portion of the blood. When the hemoglobin level reached 10 Gm. per cent, this was said to have become a pathologic anemia. Let us examine the concepts, bearing in mind what has been presented.

Approximately half of the pregnant women will go through pregnancy with hemoglobin values approximating normal. One-fourth will have mild anemias and one-fourth will have anemias which are severe. On the other hand, the Department has had one patient whose blood volume increased 60 per cent, within the accuracy of the method, and who held her hemoglobin level at 14.5 Gm. per cent without treatment. Holly has shown that the mean for the group drops. There is something wrong with this concept of a physiologic anemia, if what was said previously is correct. How would one go about testing this?

Bear in mind the statement regarding efficiency of the bone marrow when it is given the tools with which to work. Large groups of young pregnant women under institutional care were fed normal diets with the addition only of ferrous gluconate or sulfate. Almost without exception, hemoglobin values were held at normal non-pregnant levels and even increased above those when sufficient time was available. The occasional case in which there was no response was presumed to have some interference with iron absorption in the gastrointestinal tract, and response was equal to that of the others when saccharated iron oxide was given intravenously.

Contrary to some thinking, another study showed that the same proportion of untreated pregnant women developed no anemia, minor iron deficiency anemia and severe iron deficiency anemia in each of the groups with normal gastric acid, hypochlorhydria and achlorhydria. There is, then, no evidence that the frequent pregnancy interference with the gastric hydrochloric acid plays any part in the production of this anemia.

Thus, it would appear that there is no such thing as physiologic anemia of pregnancy. It is iron deficiency anemia and, thus, a pathologic state which is demonstrated to be correctable. It represents the fact that the patient's iron stores are depleted and that she is attempting to meet the pregnancy demands for hematopoesis and for the fetus from day to day intake.

All of this brings up the question of when an iron deficiency can be said to have reached a pathologic state. This depends on certain arbitrary criteria. A pregnant woman with reasonably low hemoglobin is in no immediate danger. She can, however, be seriously endangered if an infection or a postpartum hemorrhage occurs. The subjective symptoms of anemia are well known and it is gratifying to see the often striking improvement in well-being when the normal levels are reached. It is not so clearly appreciated that the patient with normal blood levels is able to handle the postpartum physical problems of caring for her baby and her home much better than even her mildly anemic sister. Pregnancy is a good and adequately long time to get ready for this and for returning menstrual blood loss.

There is, then, no clearly marked point at which it can be said from clinical features that a pathologic state has been reached. From a laboratory point of view, it might be justifiable to conclude that the mean non-pregnant values as shown represent the normal. As has been pointed out, however, even this represents a degree of iron deficiency since an iron deficiency anemia will develop in 50 per cent of women exposed to the stress of the iron withdrawal of pregnancy. It would appear, then, that some other criterion would serve our purpose better.

Iron Saturation

It has been demonstrated that in the iron-saturated pregnant woman an iron deficiency anemia will not develop. What is iron saturation and how can it be measured? Iron saturation can be recognized by visible stained iron complex in the liver or bone marrow but this does not show fine gradations of storage depletion. Iron stores for the most part are gone before the old criterion for anemia (hemoglobin 10 Gm. per cent) is reached. The patient has apparently exhausted her stores and is living on her day to day intake when the serum iron, the transport iron, reaches 60 gamma per cent. In the presence of an iron deficiency with dropping values for serum iron, 60 gamma per cent is reached when the hemoglobin has fallen to between 12 and 12.5 mg. per cent. This is the point at which therapy is indicated and, as such, is recommended as the dividing point to mark the onset of a pathologic iron deficiency.

The diagnosis of iron deficiency anemia can be made in several ways. Following known blood loss, it may be assumed. If the hemoglobin drop is mild and time is available, the exhibition of iron by mouth will produce, in the vast majority of cases, an increased reticulocyte count, a rising serum iron and hematocrit, and a slowly rising hemoglobin. No further diagnosis is required. If, however, the anemia is severe, an immediate diagnosis can be made by the finding of serum iron below 60 gamma per cent. This often is a very useful tool and should always precede the exhibition of massive doses of iron, as by the intravenous route. If the serum iron is high another cause for the anemia must be sought.

Treatment of Iron Deficiency Anemia

The treatment of iron deficiency anemia will depend upon the degree of severity. The usual patient will require only ferrous sulphate (grains 3 t. i. d.) or ferrous gluconate (grains 5 t. i. d.), which seems to be somewhat better tolerated. These are best tolerated when given with meals and best absorbed when accompanied by vitamin C-containing foods. If the anemia is severe and time lacking, saccharated iron oxide may be given intravenously with 5 per cent glucose in water or very slowly by direct injection. It is departmental policy to give an initial dose of 100 mg. followed by 200 mg. daily or as required by the urgency of the patient's condition until a total of 900 mg. has been received. The intra-

muscular iron preparation has been withdrawn from the market.

Let's get it clear: Iron deficiency anemia of pregnancy requires only the administration of iron. There is no deficiency of liver, intrinsic factor, vitamin C, folic acid, folinic acid, vitamin B_{12}, cobalt, or molybdenum. The use of expensive tablets containing these substances is nonsense and usually indicates that the physician does not know what he is treating. A specific diagnosis, and specific treatment will recommend itself.

Hypoplastic Anemia of Pregnancy

Iron deficiency anemia makes up about 95 per cent of the pregnancy anemias. In the course of a study of these, Holly found a small group of patients with an interesting lesion. In these cases, the following mean values were shown: hemoglobin 8.9 mg. per cent, hematocrit 28 volume per cent, reticulocytes 1.1 per cent and serum iron of 157 gamma per cent. Many showed a moderate decrease in blood platelets. (See R. G. Holly, Obstetrics and Gynecology, Vol. 1, No. 5, May, 1953.) This has many characteristics of the anemia of infection. It obviously is associated with iron saturation. Something is interfering with the formation of red blood cells. It does not respond to any hematopoietic factor. It apparently occurs only in the pregnant woman, undergoes spontaneous remission following completion of pregnancy, and recurs in that individual in each subsequent pregnancy.

Examination of the bone marrow shows hypoplasia of the erythroid line in contradistinction to the hyperplasia of normal pregnancy. There is no megaloblastosis and its does not respond to folic acid so that it is distinct from the so-called pernicious anemia of pregnancy, the macrocytic anemia or, more properly, the megaloblastic anemia of pregnancy. Since the red cell line in the bone marrow is hypoplastic, the term "hypoplastic anemia of pregnancy" was chosen to distinguish it from the anemia of infection and from other anemias which have been grouped under the term "aplastic anemia."

The condition seems to represent some pregnancy-specific interference with bone marrow function. There is no purpose in discussing theories of etiology here since none is proven. The anemia is usually not severe. It is possible that it responds somewhat to the administration of cobalt. When further treatment is needed, blood transfusion is the palliation of choice. A high serum iron determination in a nonresponding anemia will serve as an alert, and bone marrow examination will make the diagnosis. These patients must not be given large doses of iron intravenously.

The Megaloblastic Anemia of Pregnancy

This has been called pernicious anemia of pregnancy, macrocytic anemia and megaloblastic anemia of pregnancy. It has nothing in common with Addisonian anemia (pernicious anemia) since it does not produce neurologic lesions, does not respond to vitamin B_{12}, is not necessarily associated with achlorhydria and undergoes spontaneous remission after the completion of pregnancy. It is not necessarily macrocytic since it is an acute disease and more than one crop of erythrocytes may be present. Recognition of the presence of large red cells may require the use of the Price-Jones curve technique. The disease is characterized by the presence of megaloblasts in the bone marrow and should be termed "megaloblastic anemia of pregnancy."

It is a rarely occurring but acute disease which may destroy the patient. It is possible that it occurs in more than one form. That seen in India and the Orient is commonly associated with chronic gastrointestinal infection. In this country, it seems to occur most commonly in the early spring months and to involve patients with vitamin C deficiency.

A word of warning is necessary. The severe anemia in these patients can respond to sudden increase in blood volume, as by blood transfusion, in a manner the same as that of the Addisonian anemia patient, with sudden, rapid, irreversible cardiac collapse. Blood, if it is to be given at all, should not exceed 200 c. ml., administered slowly.

The diagnosis may be suspected from the history as above and from the acuteness and severity of the anemia. Rapid study is clearly indicated and will show an extremely low hemoglobin, high serum iron and low hematocrit value. Bone marrow biopsy should be done at once and the finding of megaloblasts in the bone marrow is diagnostic.

The treatment is folic acid in daily doses of 15-20 mg. by mouth. It probably is best given with synthetic or natural vitamin C. A rapid response may be expected and, indeed, red cells may be formed and released so rapidly that, as in Addisonian anemia under treatment, the patient may require additional iron to keep up with hemoglobin synthesis.

The disease does not respond to vitamin B_{12} but does respond, although very slowly, to a combination of B_{12} and vitamin C. No one has yet dared to hold these patients long enough on a normal diet and added vitamin C to demonstrate the effectiveness of this.

Conclusions

1. A large proportion of women show relative iron deficiency during the reproductive years. Problems with the metabolism of iron in such cases are discussed.

2. The result is a frequently occurring iron deficiency anemia of pregnancy. Recognition and treatment are discussed. A plea is made for specific diagnosis and specific treatment.

3. There is no entity which justifies use of the term "physiologic anemia of pregnancy." Correctly called "iron deficiency anemia," the condition is one which can and should be treated.

4. A pregnancy-specific anemia associated with iron saturation, hypoplasia of the erythroid line in the bone marrow, spontaneous remission after pregnancy but recurrence with each subsequent pregnancy, is described under the term "hypoplastic anemia of pregnancy."

5. Megaloblastic anemia of pregnancy is briefly discussed.

Stealing Childhood from Our Children?

It has been my contention that we are robbing our children of their childhood—that we are doing this indirectly, and often by default. Generally, in our culture, we are failing to exercise the proper parental prerogatives to control and guide our youngsters. Children are all too often setting their own standards of behavior and activity, and by permitting them to do so, we are putting too much pressure upon them. Directly or by default, we are stressing the superficialities rather than the realities of life.

All of this causes our children anxiety, insecurity and a variety of social problems. By default, we are forcing our children to adopt a facade of maturity too soon. Rather, in a climate of love, affection, understanding and closeness, we need to guide, direct, limit and structure their lives. We need to use our prerogatives as parents to set our children's standards of behavior. We need to stop "running scared." We need to fit activities and standards of behavior more closely to the needs of our children.

The increasing emotional immaturity, the emotional dependency of the culture, the types of illness which we see in our penal institutions and hospitals, and more importantly the trends in this direction that we see outside of prison walls, are alarming. By previous standards, we are becoming internally weak!

What can we do about it? Just as the least common denominator of a culture is the individual, so the smallest social unit is the family. All parents should give a great deal of thought to the problem. Individual sets of parents and children must discuss it, and then groups of parents should compare their ideas. It is important for these parents, all working together, to determine what is appropriate for the ages and levels of maturity of their children, and to limit their activities accordingly. In such discussions, parents need to be guided by the positive concept of what is good for their children, rather than of what will not be harmful. Through such appraisals within families and among families, and only in this way, can the problem be effectively dealt with.

There is indeed strength in unity. In such an atmosphere of true love, respect and understanding, we can begin to develop a slowing down of our youngsters' too-rapid rush into adulthood. We can allow an emotional maturation which will later on be consistent with a truly adult way of life and its attendant responsibilities.—Paul Kersten, M. D., in Journal, Iowa State Medical Society.

The President's Page

Making That Longer Life 'Worth Living'

How many times during the evening when you are watching television do you have to endure commercials blazing forth: "Four out of five New York doctors recommend . . .", "Give the medicine your doctor would recommend . . ."? Radio and television soap operas make heroes or heels of doctors daily. The movie industry has exploited our profession all the way from "Doctor Kildare" to "Doctor Watson." The comic strips present a generous smattering of medicos in other tear-jerking, laugh-provoking antics.

It has been only since January when the all-out propaganda campaign for medical aid for the aged tied to Social Security really got under way that we have been the butt of degrading, uncomplimentary, unkind and untrue cartoons. The gist of many of these cartoons is to try to put over to the American people that individual doctors do not support the American Medical Association. We have all heard it said of members of the press who have written scathing articles against the AMA, "Why, he isn't against doctors as individuals. Doctor So and So is his closest friend."

Happily, most people are genuinely fond of their doctors. So the big propaganda wheels are trying to defeat the efforts of the AMA by telling the people that we individual doctors are not in sympathy with the actions of that organization. In all probability not one of us buys everything that the P.T.A. endorses, nor do we endorse everything done by the service club to which we belong. But, we do embrace the basic philosophy of our parent organization and we will work diligently with all the powers at our command to prevent any further trends toward socialization.

It is to be hoped that physicians will take the time to talk to their patients about the Social Security approach to medical care for the aged. Refer them to the editorial in the March 11 issue of *The Saturday Evening Post* entitled "What Kind of Federal Help Do Our Old People Want?"

The thing about all this that hurts most is what it is doing to our young people. Dr. Kenneth E. Penrod, Vice-President of West Virginia University in charge of Medical Affairs, told us last summer at our annual meeting that every year fewer and fewer top-flight students are applying for admission to our Medical Schools. Young men now studying medicine have said to me, "What is going to happen to our profession? Why should we work so hard and so long just to do assembly-line medicine?"

The Administration is talking out of both sides of its mouth. On the one hand there is encouragement for socialized medicine, and on the other more aid to build medical schools, more money for scholarships for young men and women to study medicine and the allied arts. It is a sad commentary of our times that medicine has little to offer the youth with a good scientific mind. We may have less and less as the years go by.

We are in good company in our fight against Socialized Medicine. We can hold our heads high and look the American people squarely in the eye. Our profession is dedicated to the prevention and cure of disease and to the care of our people. Our profession has given the American people a longer life expectancy than ever before in history. It is up to us to do everything in our power to make that longer life "worth living."

John W. Hash

John W. Hash, M. D., President

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EDITORIALS

LEGISLATURE HOLDS FIRM ON 'POP TAX'

The Legislature adjourned sine die early Sunday morning, March 12, and will next convene for its annual thirty-day session on January 10, 1962. This off-year session will be devoted to a discussion of and action on the annual budget bill. No other business may be considered unless included in a proclamation issued by the Governor at least ten days prior to the convening of the session, or such business as may be included in a concurrent resolution adopted by a two-thirds vote of the members elected to each house.

Although we hope that no action will be taken at the short session looking to the repeal of the "pop tax" which has developed into quite a heated controversy, it is not too soon to initiate a campaign with the object of resisting any and all efforts that might be made to repeal the tax during the sessions in 1962 and 1963.

It will be recalled that during the session of the Legislature just ended a bill repealing the tax on soft drinks was reported out of the finance committees of both houses but permitted to die on the regular calendars of both Senate and House of Delegates. For this, we commend the Rules Committees in both the Senate and House, as well as the members generally in both branches of the Legislature.

Unless and until new revenue can be found for the maintenance of the new Medical Center at West Virginia University, we most respectfully suggest to our lawmakers that the tax of one cent per bottle on soft drinks be continued.

We frequently visit many parts of the state but have yet to find a retailer who is not satisfied with conditions as they exist, inasmuch as the price statewide for bottled drinks dispensed in machines and at lunch counters is ten cents. From what we hear as well as from what we observe, we are firmly of the opinion that the day of the five-cent soft-drink is gone, joining in oblivion the five-cent cigar.

Our further observation is that not one penny of the more than three million dollars collected annually for our Medical Center at Morgantown brings complaint from consumers who must pay the bill. We have too much at stake at the University to run the risk of this, the easiest and most innocuous form of taxation, going down the drain.

It is possible that there will be continued agitation on the part of some to repeal this tax which means so much to West Virginia. To counter such agitation, it is important that all West Virginians interested in the maintenance of the new Medical Center at Morgantown make their views known to our legislators to the end that any concerted effort that may be made to kill the "pop tax" without other adequate revenue being provided may die a-borning.

PLAIN TALK ABOUT TOMORROW

The imminent Congressional battle over President Kennedy's proposal to provide hospital and nursing care for the aged through Social Security poses an obvious and urgent challenge to the medical profession. To put it as simply as possible, medicine is challenged now to deliver a solid, realistic program of prepaid medical care for the people of the United States through its own voluntary mechanisms, or to have such a program organized and imposed upon us by our national government.

To fancy that if we only ignore this threat it will go away is to delude ourselves and to forfeit what may be our last opportunity to preserve private enterprise in medical practice. And it would be incredibly naive to suppose that organized medicine and its consecutive business allies can decisively turn back the tide that's running today without offering a clearly preferable substitute program.

What have we to offer? Why not Blue Shield? For, despite the fact that many Blue Shield Plans are inadequate in their scope of coverage and unrealistic in the degree of assurance of complete protection that they offer the patient, Blue Shield has nevertheless already enlisted the voluntary support of more than a quarter of all the people in the USA.

Blue Shield is the only major prepayment program responsible and responsive to the medical profession, the only major program free of commercial control, the only major program that is creditably identified in the popular mind with the private physician.

Even more important is the fact that Blue Shield has found the formula for providing medical services on terms that have proved eminently satisfactory both to the patient and the doctor. It is safe to say that if all Blue Shield Plans were offering as good a program as the best of them do today, private medicine could meet the challenge of the immediate future with reasonable confidence in the public decision.

Blue Shield can do as good a job as we doctors will permit it to do—and it can do as good as we demand that it do. But in many areas of this land, we physicians must lift the heavy hand of suspicion and restraint from our Blue Shield Plans, and offer these plans of ours a bold and helping hand of confidence and leadership. There may be other ways of saving free medicine, but Blue Shield lies close at hand—and ready. When do we begin to move?

PERSONAL PHYSICIAN

President Kennedy has expressed and been granted a wish fundamental and basic to all of our people. Shortly after his election, the President said to Dr. Janet G. Travell, who had been his physician in even more trying times and had been traveling with him since election day, "I don't want to change my doctor now. How about coming to the White House" (*Newsweek*, 2/6/61). Thus it was that the President of the United States, the man for whom everything is provided, who has at his constant command the finest medical talent that the Army, Navy or Public Health Services can provide, did arrange and secure for himself that service for which he felt the most intimate need—the need for a personal physician.

This is an expression of recognition and appreciation of a personal service of the highest order. Doctor Travell merits this distinction for years of service traditional to good medical care. She relieved not only the pain of the body, but also the eroding fear which accompanies illness. She fostered hope, inspired confidence and restored health, and may it be further noted that her ministrations have always been on a personal and never on a governmental or political basis. She has treated Senator Barry Goldwater with the same selfless devotion that she has shown our President.

In this, our hour of doubt and indecision, she has shown the profession of medicine that the best medical service is not now and never can properly be a matter of political action. For this great service, she has our blessing and our highest praise.

Mr. President, your constituents share with you the same hopes and aspirations. Theirs is the same uncertainty, the same fear and the same reaching for that in which they have faith and confidence. In your great concern for public health, Mr. President, do not overlook the most pressing need of the sick patient. The needs and desires of your country-men are the same as your own—they also want a Personal Physician.—D. W. McLean, M. D., in Detroit Medical News.

Sharp Increase in Life Span

An infant born in this country today can expect to live half-again as long as one born at the turn of the century, the Health Information Foundation estimates. Present life expectancy—the highest ever recorded—is 69.7 years, compared to 47.3 in 1900. Females, HIF notes, have benefited most from the increase. Men have gained 20.1 years, women 24.4 years. Their respective average life-spans now: 66.4 years and 72.7 years.—Medical World News.

GENERAL NEWS

Drs. Thorek and Ricketts To Speak At 94th Annual Meeting

One of the most popular physicians ever to speak before medical groups in this state has accepted an invitation to appear as a guest speaker at the 94th Annual Meeting of the West Virginia State Medical Association at The Greenbrier in White Sulphur Springs, August 24-26.

The speaker will be Dr. Philip Thorek of Chicago, who has presented papers at several annual meetings in the past few years. His last appearance at The Greenbrier was during the 91st Annual Meeting in

Philip Thorek, M. D.

Henry T. Ricketts, M. D.

1958. Doctor Thorek is Clinical Associate Professor of Surgery at the University of Illinois College of Medicine.

His subject will be "Diseases of the Esophagus in General Practice."

Doctor Thorek received his M. D. degree from the University of Illinois College of Medicine in 1931. He served an internship at Cook County Hospital in Chicago and took postgraduate work in Vienna, 1932-33.

He is also professor of surgery at the Cook County Graduate School of Medicine; attending surgeon at Cook County Hospital; and co-surgeon-in-chief at American Hospital. He is active in Surgical Cinematography research.

Doctor Thorek is a Diplomate of the American Board of Surgery and a Fellow of the American College of Surgeons, International College of Surgeons and the American College of Chest Physicians. He is a member of the Chicago Medical Society, the Illinois State Medical Association and the American Medical Association.

Dr. Henry T. Ricketts Accepts Invitation

Dr. Halvard Wanger of Shepherdstown, chairman of the Program Committee, also announced that another Chicago physician, Dr. Henry T. Ricketts, had accepted an invitation to appear on the scientific program during the three-day meeting.

Doctor Ricketts, who is Professor of Medicine at the University of Chicago School of Medicine, is an authority in the field of diabetes and has served a term as President of the American Diabetes Association.

His subject will be "Types of Diabetes and Standards of Control."

He was born in Berlin, Germany, of American parents, and was graduated from the University of Chicago in 1924. He received his M. D. degree from Harvard Medical School in 1929 and interned at the Hospital of the University of Pennsylvania. He served a residency at Billings Hospital in Chicago, 1931-33.

He was appointed instructor in medicine at the University of Chicago School of Medicine in 1933; assistant professor, 1939-43; associate professor, 1943-49; and professor in 1949.

Doctor Ricketts has written numerous articles on diabetes, insulin and aviation medicine, and is the author of the book, "Diabetes Mellitus, Objectives and Methods of Treatment."

Scientific Program Nearly Completed

Doctor Wanger and the other members of the Program Committee, Drs. Hu C. Myers of Philippi and Thomas H. McGavack of Martinsburg, have almost completed arrangements for the general scientific program which will be presented during the three-day meeting. The names of the prominent physicians and surgeons who will appear as guest speakers will be announced in future issues of *The Journal*.

Several of the guest speakers will also present papers before meetings of the sections, societies and affiliated associations which will be held afternoons during the meeting.

AMA President to Speak

Dr. Leonard W. Larson of Bismarck, North Dakota, who will be installed as President of the American Medical Association at the annual meeting of that organization in June, will attend the meeting and speak before the final session of the House of Delegates on Saturday afternoon, August 26.

Supreme Court Finds for Board In Preston Hospital Case

The right of the Board of Trustees to determine who may or may not practice in a hospital in West Virginia was upheld by the Supreme Court of Appeals in a decision handed down on March 9, 1961 in the case of Frank A. Wallington, D.O. v. Kermit Zinn, et al, trustees of the Preston Memorial Hospital in Kingwood, and the Joint Commission on Accreditation of Hospitals, an Illinois corporation.

The opinion was written by Judge Leslie E. Given.

The suit was certified to the Supreme Court of Appeals after the Circuit Court of Preston County had sustained a demurrer filed by the Board of Trustees of Preston Memorial Hospital.

Doctor Wallington originally instituted the suit in the Circuit Court of Preston County, seeking to obtain an injunction to compel the Board of Trustees to permit him to use the facilities of Preston Memorial Hospital.

It was brought out in the case that Doctor Wallington was granted the right to use the facilities of the hospital on a six-month probationary basis, effective in November, 1959. Subsequently, the Joint Commisson on the Accreditation of Hospitals was informed that the osteopathic physician had been permitted to use the facilities of the hospital and accreditation was withdrawn by the Board in December, 1959.

Shortly thereafter, the Board of Trustees revoked the privilege accorded Doctor Wallington to practice medicine in the hospital; however, by orders entered in the case on March 8, 1960, and April 29, 1960, the hospital was restrained from recinding the privilege of Doctor Wallington to practice in the hospital until May 20, 1960, that being the original expiration date of the six-month probationary period granted him by the Board of Trustees.

The defendants, trustees of the Preston Memorial Hospital, filed a demurrer and cited additional grounds of demurrer to the plaintiff's bill of complaint.

In an opinion handed down in July, 1960, in the Circuit Court of Preston County by Judge Melvin C. Snyder, it was brought out that our courts had held that "one who has been duly licensed to practice as an osteopathic physician and surgeon has a right in the practice of his profession to treat any human ailment or infirmity by any method as physicians and surgeons may do" under the provisions of the code; however, it was made clear in Judge Snyder's decision that the Board of Trustees of a public hospital has the responsibility of promulgating rules and regulations governing the operation of the hospital, the use of its facilities and the practice of medicine therein.

The principal question raised in the Preston Circuit Court was whether the Board of Trustees had the right to exclude an osteopathic physician and surgeon from practicing his profession in a public hospital.

In Judge Snyder's opinion it was stated that "It is generally agreed that the managing authorities of a hospital may . . . in the absence of statutory restrictions prescribe the qualifications of physicians or surgeons to practice therein."

Judge Snyder also stated in his opinion, that, from the standpoint of the Board of Trustees, the accreditation of the hospital appears desirable. "It is accepted as a yardstick in measuring its professional standard. It is no doubt a factor in the recruitment and maintaining [of] a scientific and professional staff."

Judge Snyder held that the mere fact that an osteopathic physician or a doctor of any other school of medicine is licensed to practice medicine in West Virginia, does not of itself give him any legal right to the arbitrary use of the county hospital and its facilities. "The right to practice medicine is not a property right, but only a license subject to being revoked. So no property right is being taken in denying him the use of the hospital facilities.

"Doctors, regardless of whatever school of medicine they represent, do not have a Constitutional and Legislative right to practice their profession in a public hospital. The Board of Trustees have a discretion in the granting of this privilege."

In the opinion handed down by Judge Given affirming the rulings of the Circuit Court of Preston County, the following is quoted from Article 3, Chapter 7 of Michies' 1955 Code of West Virginia:

"The administration and management of any county public hospital acquired, equipped, furnished, improved or extended under section fourteen of this article shall be vested in a board of hospital trustees consisting of not less than five members appointed by the county court . . . Such board of trustees shall provide for the employment and shall fix the compensation and remove at pleasure all professional, technical and other employees, skilled or unskilled, as it may deem necessary for the operation and maintenance of the hospital; and disbursement of funds in such operation and maintenance shall be made only upon order and approval of such board. The board of trustees shall make all rules and regulations governing its meetings and the operation of the hospital."

The progress of the suit through the Preston County Circuit Court is reviewed at length in the opinion handed down by Judge Given. "We are of the view that in the instant case the action of the board of trustees of the Preston Memorial Hospital, complained, of, was within the power vested in the board by the statute quoted above. The power, of course, does not relate to, is not limited to, any particular licensed practitioner or to any school of medicine, but to the overall duty and responsibility of the board in the efficient operation or management of the hospital, for the purpose for which created, the best service for the greatest number of people in the community."

It is further stated in the opinion that "the basic problem is not whether a certain practitioner, or practitioners of a certain school of medicine, may be allowed or denied the use of the facilities of such a hospital, or the right to practice therein. The real problem is one of practicality, the best manner of operating and maintaining a particular hospital in such a way that the health of the greatest number of people entitled to benefits therefrom will receive the same. In the instant case, to illustrate, the board of

trustees has decided that the proper and best way to operate the hospital, in the circumstances involved, is to deny the use of the facilities thereof to a particular practitioner, the plaintiff. That the plaintiff happens to be a practitioner of the osteopathic school of medicine is only incidental. If the situation and circumstances were the reverse we would have no hesitancy in saying that a practitioner of any other school of medicine could be denied the right to the use of such facilities.

"Plaintiff further argues that the action of the board denying plaintiff the right to use the hospital facilities, for the reason that the defendant The Joint Commission on Accreditation of Hospitals refused to grant accreditation to the hospital, amounts to an unwarranted and unlawful delegation of the duties of the board of trustees to a private corporation not responsible or accountable to the State. We think, however, that the allegations of the bill of complaint, here on demurrer, do not fairly raise the question of the delegation of authority by the board of trustees. True, the action of the board complained of was probably the result of the refusal of the Joint Commission on Accreditation of Hospitals to grant accreditation to the Preston Memorial Hospital. That action of the board, nevertheless, was its own, and no delegation of authority appears from the allegations of the bill of complaint."

Answering the contention of the plaintiff that the section of the Code relating to the licensing of hospitals and providing that no license shall be reviewed "solely by reason of the school or system of practice employed or permitted therein," necessarily precludes the right of the Board of Trustees of Preston Memorial Hospital to deny the plaintiff the right to practice in the hospital, the court held that in its opinion, the statute relates only to the licensing of a hospital and not to the question of what practitioners shall be entitled to practice in such a hospital, and does not attempt to control or limit the powers specifically vested in the Board of Trustees.

Proposed Constitutional Amendment

The following amendment to the Constitution of the West Virginia State Medical Association, offered at the 93rd Annual Meeting at The Greenbrier in White Sulphur Springs, August 25-27, 1960, by James P. McMullen, M. D., of Wellsburg, Chairman of the Committee on Constitution and By-Laws, will be acted upon finally by the House of Delegates at the 94th Annual Meeting in 1961:

Article IX

Sec. 3—Amend the Section in line one by deleting the word "President."

(The effect of the amendment would be to eliminate the necessity of electing a president at each annual meeting. Section 2 of Chapter VI of the By-Laws provides that the president elect shall be installed as president as the final order of business at the last session of the House of Delegates at each annual meeting).

Doctor Hash Reviews State MAA Program at AMA Meeting

Dr. John W. Hash of Charleston, President of the West Virginia State Medical Association, participated in a panel discussion during a meeting of the American Medical Association's Committee on Indigent Care which was held at the Pick-Congress Hotel in Chicago on Sunday, March 19.

John W. Hash, M. D.

The subject of the discussion was "Problems in Implementation of the Medical Assistance for the Aged Program." Doctor Hash reviewed the implementation of the MAA program in West Virginia since the legislation was enacted into law by federal and state legislative bodies last fall.

The meeting, which was held in conjunction with a Medical Legislative Conference sponsored by the AMA in Chicago, March 18-19, was also attended by Dr. Frank J. Holroyd of Princeton, a member of the AMA Legislative Council and chairman of the State Medical Association's Legislative Committee, and Charles and William Lively, Executive Secretary and Executive Assistant, respectively.

Funds Available for MAA Program Estimated for Next Fiscal Year

Complete information concerning the progress of bills through the Legislature was reported in legislative bulletins mailed at various times during the 60-day session of the Legislature, which adjourned sine die early on the morning of March 12.

In the Final Bulletin dated March 13, the amount appropriated for the continuance of the new Medical Assistance for the Aging program was shown to be $1,325,256 for the fiscal year ending June 30, 1962. At the time the bulletin was sent to the printer, information with reference to the amount to be provided by the federal government on a matching basis was not available.

It is now estimated that federal funds in approximately the amount of $3,231,729 will be available to match the state funds just appropriated. This is on the basis of 70.32 per cent federal funds and 29.68 per cent state funds.

The combined federal and state appropriations for medical assistance to the aging during the fiscal year ending June 30, 1962, should be approximately $4,556,985.

The three most critical problems now for the modern college president are salaries for professors, football for the alumni and parking for the students.—Anon.

Second Interim Progress Report Of WVU Teaching Hospital

A second interim progress report concerning the development of the teaching and clinical programs at the West Virginia University Medical Center has been prepared for publication in *The Journal* by Mr. Cletis Pride, Public Information Officer. The report follows:

Edmund B. Flink, M. D.

The West Virginia University Hospital has been in service for a little more than six months. In this time, there has been considerable expansion of facilities and services, with 140 beds now in use. A progress report by departments seems in order. Each clinical department chairman has expressed satisfaction with accomplishments to date.

The "whole-hearted enthusiasm" of the third-year medical students has been the most gratifying aspect of the past few months, according to Dr. Edmund B. Flink, Professor and Chairman of the Department of Medicine. "They have matured rapidly and continue to make members of the staff feel well-repaid for our teaching efforts.

"The fine cooperation of physicians throughout the state also has been most gratifying. Doctors have referred a wide variety of patients whose problems have been challenging and very interesting. We could not function without the fine doctors' cooperation.

"We have been very busy, and in turn have kept the students busy," Doctor Flink continued. "Each student has had at least three new patients a week from the time of the opening of the fall session of the school. The average daily census on the Medical Service now is forty. The spirit of friendly cooperation among members of the staff has been outstanding."

Dr. Bernard Zimmermann, Professor and Chairman of the Department of Surgery, expressed pleasure with the types of patients treated by his department and said he is particularly grateful for the interest and cooperation shown by referring doctors.

Approximately 450 surgical procedures have been done since the Hospital opened. A rather large proportion have been in chest surgery, cardiovascular surgery, and neurosurgery. Doctor Zimmermann anticipates that cardiovascular operations will continue to increase as more advanced mechanical and diagnostic procedures become available in this field.

"The establishment of an inter-department chest clinic and conference is giving us the opportunity to bring together many disciplines in evaluating chest problems," Doctor Zimmermann stated.

"We haven't had as large a number of routine surgical problems as we think our training program requires, but we hope this situation will improve with time. We have seen a substantial number of emergency cases, including many chest injuries, which our students and residents have become adept at handling.

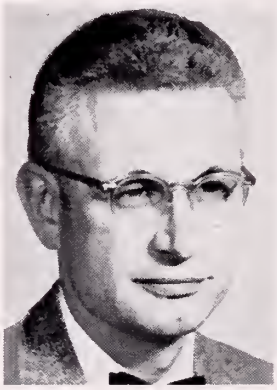
"In general," Doctor Zimmermann said, "we are very much impressed by the enthusiasm of the students. Many have worked longer hours than required.

"Our initial experiences have been encouraging, but we must have a lot more patients before we become a true University Hospital. We are pleased that a majority of the patients received so far have been people we can really do something for. We are hopeful that present trends will continue."

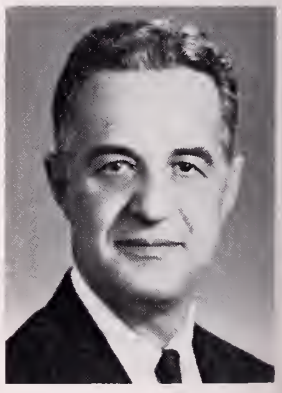
Dr. Nicholas W. Fugo, Professor and Chairman of the Department of Obstetrics and Gynecology, said the number of deliveries in his department has increased steadily since October 19, when the first eight pound, twelve ounce, lusty male infant made his debut. There have been no unusual number of complications, the most severe being a case of preeclampsia which was delivered by laparotrachelotomy.

"The trend is toward the referral of the indigent patient, who is ideal from the viewpoint of the medical student," Doctor Fugo said. "With the exception of the first group of students, the externs have each participated in approximately 30 deliveries. They also have had ample experience in prenatal and postpartum care.

"The Gynecological Service also is expanding. The trend in this area is toward the care of patients with malignancies of the reproductive organs. There are, however, increasing numbers of patients with uterine descensus and related conditions. The out-patient



Bernard Zimmermann, M. D.



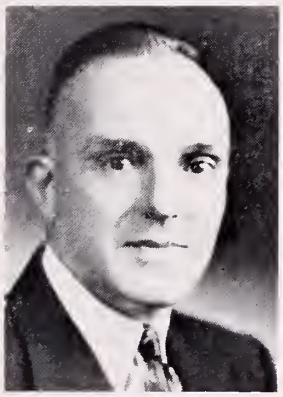
Nicholas W. Fugo, M. D.

service has had patients with menstrual disorders, vaginal infections and infertility problems. It is hoped the service will continue to expand to meet the demands of larger classes and a residency program."

Dr. William G. Klingberg, Professor and Chairman of the Department of Pediatrics, noted that he and his staff have treated 194 "in patients" since September 15, 1960. Initially, there was a rapid increase each month in the number of cases requiring hospitalization, but recently that number has leveled off at an average of 31 per month. The present bed capacity is 29 and the average daily patient load is 18 to 21.

"With our expanding staff," Doctor Klingberg said, "We now are able to handle any patient problem that might come up. In the immediate future, we hope to see a need for expansion of our in-patient service to 50 beds and, ultimately, to 75. We are, therefore, encouraging doctors of the whole state to increase their patient referrals to us so that adequate numbers, encompassing a good variety of problems of teaching and research value, will be available to us. If we can continue with our present good variety and increase the absolute numbers, it will afford an even better teaching situation for the students and the house staff.

William G. Klingberg, M. D.



Harold I. Amory, M. D.

"Our out-patient clinic is still small, requiring only two afternoons a week to care for the present load. We will have a real need for more routine pediatric problems here by next fall to supply our senior clerks with good teaching material. A step in this direction has been made by our agreeing to see and treat the patients of Monongalia County Pediatric Health Clinic weekly. Expansion of this out-patient facility is both needed and expected with our anticipation of having available in the future a daily pediatric comprehensive clinic where much preliminary evaluation can be carried out, and in this way reduce the necessary hospitalization days to a minimum. At present, we are averaging 80 pediatric out-patient clinic visits per month.

"In summary, may I say that I am pleased with the present expansion of the Pediatric Service of the Medical Center, but that I also need and anticipate much more expansion in the future. By this means, we can offer a needed consultation service to the referring doctor and to the patient and properly satisfy our other reasons for existing; namely to teach medical students, train house officers, offer continuing postgraduate education, and do both basic and clinical research."

Progress in radiology has been unexpectedly rapid, according to Dr. Harold I. Amory, Professor and Chairman of that Department. A substantial number of the usual conditions such as biliary calculate and duodenal ulcers have been encountered and indexed for clinical research purposes.

"The outstanding material, however, is not of the garden variety but from anomalus and other pathological conditions which are obscure or unusual and generally require for diagnosis expensive, complex equipment and close team cooperation," Doctor Amory said. "The cases of special interest are congenital and acquired pathologic lesions of the cardiovascular system demonstrated by arteriography, using biplane rapid film changes capable of producing twelve films per second."

Neuroradiological examinations, including vascular and air studies, are producing large quantities of interesting teaching films of conditions such as cerebral aneurysms and intracranial tumors.

Doctor Amory said the Radiation Therapy Section is treating a surprisingly large number of cases of carcinoma of the lung. These cases afford study of the effectiveness of high voltage radiation in this advancing disease, as well as in the roentgen diagnosis.

A good start has been made in the University Hospital. All the services except psychiatry now are functioning and ready for rapid expansion. Next September, a class of 47 third-year students is expected, together with a sizeable house staff. The service of the Hospital to the people and the physicians of West Virginia will continue to increase.

Dr. J. E. Martin, Jr., To Participate In ACP Fireside Conferences

The 27th annual meeting of the American College of Chest Physicians will be held at the Commodore Hotel, New York City, Thursday, June 22 through Monday, June 26.

A joint session with the AMA Section on Diseases of the Chest will be held at the Coliseum on Monday, June 26. This will be the first joint meeting in the history of the two societies.

Dr. J. E. Martin, Jr., of Elkins, will participate in the popular Fireside Conferences and a joint session sponsored by the AMA and the College, which will be held at the Commodore Hotel on Monday evening, June 26.

Further information concerning the program may be obtained by writing Mr. Murray Kornfeld, Executive Director, ACCP, 112 East Chestnut Street, Chicago 11, Illinois.

ACP Regional Meeting Held in Pittsburgh

The 1961 Regional Meeting of the American College of Physicians was held at the University of Pittsburgh School of Medicine in Pittsburgh, February 2-3. Of the total attendance, 39 fellows, associates and guests were present from West Virginia. The region embraces Ohio, Western Pennsylvania, and West Virginia.

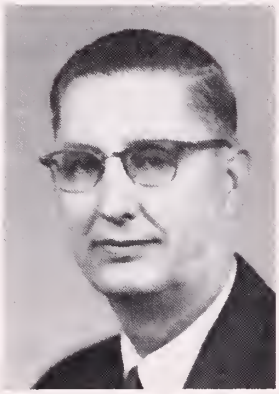
Interesting scientific papers were presented during the two-day meeting which ended with a banquet at the Hilton Hotel on the evening of February 3. Dr. Chester S. Keefer, president of the College, was the principal speaker, and honor guests included Dr. Edward Rosenow, executive director of the College.

Dr. Robert U. Drinkard of Wheeling is the West Virginia Governor of the American College of Physicians.

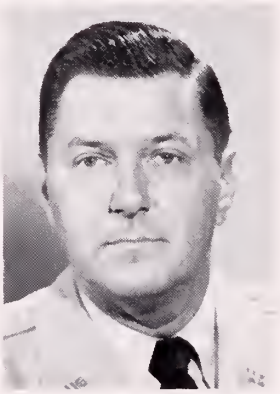
Public Health Association Meeting In Morgantown, May 10-12

"Health Mobilization—The Built-InConcept" will be the theme for the 37th Annual Conference of the West Virginia Public Health Association which will be held at the Hotel Morgan in Morgantown, May 10-12.

Dr. B. S. Brake of Clarksburg, president of the Association, will preside at the meeting which is expected to attract more than 250 professional and voluntary



Kirk T. Mosley, M. D.



Lt. Col. George F. Rumer

workers interested in the promotion of public health in West Virginia.

The program will be devoted exclusively to the subject of health mobilization, a term used for the responsibility of all individuals, professions and agencies in developing all health and health protective resources for effective service in emergency situations created by man-made or natural disasters.

General sessions will be held mornings and afternoons during the three-day meeting. The following program will be presented on Wednesday, May 10:

"Health Services in Emergencies."—C. J. Wagner, M. D., Chief, Division of Health Mobilization, USPHS, Washington, D. C.

"Health Mobilization in the Future."—Kirk T. Mosley, M. D., Commissioner of Health, Oklahoma State Department of Health, Oklahoma City.

"The State Program for Health Mobilization."—N. H. Dyer, M. D., Director, State Department of Health, Charleston.

"Mass Casualty Care."—Lt. Col. George F. Rumer, Director, Department of Military Medicine and Surgery, Army Medical Service School, Brooke Army Medical Center, Fort Sam Houston, Texas.

"Operational Problem."—Norman R. Tufts, Chief, Health Mobilization Training Section, Training Branch, CDC, USPHS, Atlanta, Georgia.

Thursday's Program

The second session will be held on Thursday, May 11. The speakers and their subjects will be as follows:

"Expanded Functions of Medical and Allied Professions."—Eugene J. Ryan, M. D., Chairman, Medical Emergencies and Civil Defense Committee, West Virginia State Medical Association.

"Chemical and Biological Threat."—Colonel Victor Searle, Chemical Corps Liaison Officer, Division of Health Mobilization, USPHS, Washington, D. C.

"Defense Against Biological Warfare and Communicable Diseases."—Dr. Kirk T. Mosley.

"Ecological Radiological Health."—Cyril Comar, Cornell University, Ithaca, New York.

Final Session on Friday

The following program will be presented at the final session on Friday, May 12:

"Family Survival."—Major James D. Clark, Chief, Medical Self Help Training Section, Division of Health Mobilization, USPHS, Washington, D. C.

"Survival in a Primitive Environment."—Harold G. Scott, Scientific Officer, Insect and Rodent Control, Training Section, USPHS, Atlanta, Georgia.

"Psychological Expectations."—Karl W. Keller, M. D., Professor of Psychiatry, University of Louisville School of Medicine, Louisville, Kentucky.

"Expanding Hospital Facilities."—Max Klinghoffer, M. D., Elmhurst, Illinois.

Business meetings of the various sections of the Association have been planned during the conference.

Reception and Banquet

A reception honoring the president of the Association will be held on Friday evening and will be followed by a banquet in the ballroom of the Hotel Morgan. Doctor Brake will deliver his presidential address at the banquet, and awards will be presented at that time. A dance will follow the banquet.

Dr. Michael A. Viggiano of New Martinsville, health officer for District No. 7, is chairman of the committee making arrangements for the meeting. The co-chairmen are Dr. L. A. Dickerson of Charleston, Director of the State Department of Health's Division of Disease Control and Mr. Samuel J. Hawkins of Charleston, program consultant in health mobilization.

TB and Pulmonary Diseases Symposium At Saranac Lake, July 10-14

The 10th Annual Symposium for General Practitioners on Tuberculosis and Other Pulmonary Diseases will be held at Saranac Lake, New York, July 10-14. The Symposium will be sponsored by the American Thoracic Society, Saranac Lake Medical Society and the Adirondack Counties Chapter of the New York State Academy of General Practice.

Thirty-five prominent physicians and surgeons will appear as guest speakers. Morning and afternoon sessions will be held in various sanatoria and laboratories in the Saranac Lake area. Physicians will also have an opportunity to make patient rounds.

Registration fee for the five-day meeting is $60. Further information may be obtained by writing to Dr. John N. Hayes, General Chairman, P. O. Box 627, Saranac Lake, New York.

Relocations

Dr. Frederick R. McKeehan of Morgantown, who has been affiliated with the West Virginia University Health Service, has moved to Ravenna, Ohio, where he will resume private practice, with offices at 270 South Chestnut Street.

Medical Meetings, 1961

The following is a partial list of national, state and district medical meetings scheduled for 1961:

Apr. 3-8—Gill Memorial's Spring Conf., Oph. and Otol., Roanoke, Va.
Apr. 6-8—W. Va. Acad. Oph. and Otol., White Sulphur Springs.
Apr. 10—Medical Licensing Board, Charleston.
Apr. 10-12—Am. Acad. Pediatrics, Washington, D. C.
Apr. 10-13—Ohio St. Med. Assn., Columbus.
Apr. 13—Symposium on Air Pollution, W. Va. Tech, Montgomery.
Apr. 14-15—W. Va. Chap. ACS, White Sulphur Springs.
Apr. 14-15—AMA Medico-Legal Conf., Louisville, Ky.
Apr. 17-20—AAGP, Miami Beach.
Apr. 21-22—W. Va. St. Soc. Med. Technologists, Wheeling.
Apr. 26-28—Maryland Med. & Chirurgical Faculty, Baltimore.
May 5-7—Am. Soc. Internal Med., Miami Beach.
May 8-12—Am. Coll. Physicians, Miami Beach.
May 10-12—W. Va. PH Assn., Morgantown.
May 19-21—W. Va. Chap. AAGP, Civic Center, Charleston.
May 22-25—Am. Urological Assn., Los Angeles.
June 22-26—ACCP, Hotel Commodore, New York City.
June 26-30—Annual Meeting, AMA, New York City.
July 23-26—W. Va. Dental Assn., White Sulphur Springs.
Aug. 24-26—W. Va. State Medical Association, The Greenbrier, White Sulphur Springs.
Oct. 2-6—Am. Coll. Surgeons, Chicago.
Oct. 5—Rural Health Conference, Jackson's Mill.
Oct. 18—W. Va. St. Nurses Assn., Clarksburg.
Oct. 19-21—W. Va. Hospital Assn., Morgantown.
Oct. 27-29—PG Institute, Martinsburg.
Nov. 6-9—Southern Medical Assn., Dallas, Texas.
Nov. 28-Dec. 1—AMA Clinical Meeting, Denver.

Change of Address

Members of the West Virginia State Medical Association are requested to notify the headquarters offices promptly concerning any change in address. Notices should be mailed to Box 1031, Charleston 24, West Virginia.

AMA and ACCP Plan Joint Meeting in New York City

A one-day scientific meeting, sponsored jointly by the American Medical Association and the American College of Chest Physicians, will be one of the features of the 110th Annual Meeting of the AMA in New York City in June.

The joint program which will be presented on Monday, June 26, will be of interest to both specialists and general practitioners. It will be the first meeting sponsored jointly by the two organizations and will consist of symposiums, panel discussions, a roundtable luncheon and fireside conferences.

Moderators of the symposiums and panels will be Drs. Arthur M. Master of New York City, Sol Katz of Washington, D. C., and George C. Griffith of Los Angeles.

The joint program will follow the scientific assembly of the American College of Chest Physicians at its 27th annual meeting in New York City, June 22-26, just prior to the AMA meeting.

Annual AAGP Scientific Assembly In Miami Beach, April 17-20

The 13th Annual Scientific Assembly of the American Academy of General Practice will be held in Miami Beach, Florida, April 17-20. Scientific sessions will be held in the Miami Beach Convention Hall, while the Congress of Delegates, the Academy's policy-making body, will hold its sessions at the Eden Roc Hotel.

Dr. Seigle W. Parks of Fairmont and Dr. Thomas H. Blake of St. Albans will represent the West Virginia Chapter in the Congress of Delegates. Alternates are Dr. Halvard Wanger of Shepherdstown and Logan W. Hovis of Parkersburg.

Sessions of the Congress of Delegates will be held prior to the formal opening of the meeting. The first session will be convened at 2 P. M. on Saturday, April 15, and the final session will be adjourned at noon on Monday, April 17, when the scientific sessions open.

One of the features of the meeting will be a panel discussion on "Economics of Medicine—Today and Tomorrow." The participants will include Dr. E. Vincent Askey of Los Angeles, President of the American Medical Association, and Mr. Walter Reuther, President of the United Auto Workers Union. The moderator will be Dr. John S. DeTar of Milan, Michigan, a former president of the Academy.

More than 25 scientific lectures and medical panels will be presented and the material will cover a wide spectrum of medical experience. There will be more than 400 scientific and technical exhibits.

The president's reception and dance will be held on Wednesday evening, April 18. Preceding the reception, Dr. Floyd C. Bratt of Rochester, New York, the president elect, will receive the gavel from the outgoing president, Dr. John G. Walsh of Sacramento, California.

Other highlights of the meeting include presentation of ten $1,000 general practice residency training awards to interns or young physicians who plan to enter general practice. The program is carried on through a grant from Mead Johnson & Company of Evansville, Indiana.

The two Academy members who have contributed the most significant scientific articles published in *GP*, official publication of the Academy, will receive awards of $1000 from Ross Laboratories of Columbus, Ohio.

PG Course on 'Growth and Aging'

The American College of Physicians will sponsor a postgraduate course on "Problems of Growth and Aging" at the Landenau Hospital in Philadelphia, April 11-14. Registration fee for the four-day course is $60 for ACP members and $80 for non-members.

Further information may be obtained by writing to Dr. Edward C. Rosenow, Jr., Executive Director, ACP, 422 Pine Street, Philadelphia 4, Pennsylvania.

Parkersburg Academy Sponsors Medical Career Day

Members of the Parkersburg Academy of Medicine and personnel at St. Joseph's and Camden-Clark Memorial hospitals were hosts to more than 100 Explorer Scouts who participated in a Medical Career Day held recently in that city.

Dr. William E. Gilmore, president of the Academy, served as chairman of the program committee. The one-day meeting included guided tours of the hospitals and discussions concerning careers in medicine and allied fields.

Dr. William E. Gilmore, president of the Parkersburg Academy of Medicine, explains a medical exhibit to several of the Explorer Scouts who participated in a Medical Career Day sponsored by the Academy and St. Joseph's and Camden-Clark hospitals. In the background is Dr. Jack J. Stark (Photo, courtesy The Parkersburg News).

Registration began at 8:30 A. M. at St. Joseph's Hospital and was followed by a half-hour devotional period led by scouts from one of the participating posts. Dr. Jack J. Stark, representing the Academy, and Mr. Jack Jones, business manager of St. Joseph's, delivered addresses of welcome.

Physicians Serve as Guides

Several films on medical subjects were shown and then the scouts were divided into two groups for tours of the hospital. Each group was further divided into groups of six to eight and physicians served as guides during visits to various departments.

The visit to the operating room was made realistic by the presence of a make-believe surgical patient. The scouts were also dressed in caps, gowns and masks prior to entering the room.

The Academy was host at a luncheon served at noon in the cafeteria of the nurses home at St. Joseph's Hospital.

Careers in Medicine and Allied Fields

The first hour of the afternoon session was devoted to a series of talks on careers in medicine and allied fields. Participants were as follows:

Drs. Edward B. Holmes, Charles L. Goodhand, Robert D. Crooks, Oliver H. Brundage, Harold W. Ulch, Rex Dauphin and Logan W. Hovis; Mrs. Wilma Gillespie, R. N.; Mr. Lyle Dayhoff, Laboratory Technician; Mr. John Nebera, Registered Physical Therapist; and Mr. Jack Jones.

A "Stump the Experts" question and answer period concluded the program. Doctor Gilmore served as moderator and the panelists were Drs. E. P. Lynn, Charles W. Thacker and Rex Dauphin.

The scouts were also given several opportunities to visit scientific exhibits prepared for the occasion.

Program Praised

Dr. Charles L. Goodhand, a participant in the program and who is also chairman of the Public Service Committee of the West Virginia State Medical Association, praised the meeting sponsored by the Academy and the two hospitals.

"This is the type of program our committee has urged component societies to undertake on the local level," Doctor Goodhand said. "We believe such programs will give many of our high school students a better insight into the practice of medicine, and will also encourage bright students to study pre-medicine when they enter college."

New Association Member

Dr. Chuan H. Lee, Laird Memorial Hospital, Montgomery (Fayette). Doctor Lee, a native of Shanghai, China, was graduated from St. John's University in Shanghai and received his M. D. degree in 1947 from the Pennsylvania Medical College of that University. Formerly located at Mt. Sinai Hospital in New York City, he was licensed to practice in West Virginia in 1960. His specialty is radiology.

Heart Association Catalog Available

"Publications and Visual Aids for Physicians," a catalog which lists and describes all of the professional materials produced by the American Heart Association, has recently been revised and updated. Copies may be obtained by writing to the West Virginia Heart Association, P. O. Box 5336, Capitol Station, Charleston, West Virginia.

Auto Emblems Available

A supply of auto emblems, bearing the insignia of the West Virginia State Medical Association, is kept on hand at all times at the headquarters offices in Charleston. The price of each emblem is $3.25 postpaid.

Dr. Nestmann Presents Paper at ACP Meeting

Dr. Ralph H. Nestmann of Charleston was among physicians presenting papers at a regional meeting of the American College of Physicians at the University of Pittsburgh School of Medicine in Pittsburgh, February 2-3. The subject of his paper was "The Detection of Emotional Illness in a General Hospital."

Plans Completed for Symposium On Air Pollution

Arrangements have been completed for the first annual Air Pollution Symposium at Montgomery on April 13, 1961. The symposium, which will be held in the Physical Education Building of the West Virginia Institute of Technology, is being sponsored by the Montgomery Chamber of Commerce, the Fayette County Medical Society, and the College.

The meeting will be called to order at 9:30 A. M., with introductory remarks by Dr. W. B. Axtell, president of WVIT, Mr. Gordon Billheimer, president of the Montgomery Chamber of Commerce, and Dr. L. C. Nelson, WVIT dean of engineering.

The following program will be presented during the morning session:

"Public Health Service Air Pollution Program." —Jean J. Schueneman, Chief of Technical Services, Air Pollution Engineering Research.

"The West Virginia Air Pollution Program."—N. H. Dyer, M. D., State Director of Health.

"The Importance of Clean Air for Industrial Growth."—Mr. Emerson Venable of Pittsburgh, Member of the Air Pollution Control Advisory Committee.

The principal address at the afternoon session will be presented by Dr. Chauncey D. Leake of Columbus, Assistant Dean of Ohio State University College of Medicine. His subject will be "Immediate and Long Range Effects of Air Pollution on Health."

There will be a panel discussion following Doctor Leake's address. The participants will be representatives of the Union Carbide Chemicals Corp., E. I. Dupont de Nemours and Company, Appalachian Electric Power Company; and the State of West Virginia.

The symposium has been approved by the American Academy of General Practice for two hours Category II credit.

Dinner will be served in the Tech Cafeteria at six o'clock, and a play, "Two on an Island," will be presented in the Conley Hall Arena at eight o'clock.

The registration fee of $2 will include luncheon and coffee break, and the subscription dinner will be 85 cents per person. There will be no admission fee for the play.

Formal application blank may be obtained by writing Mr. Gordon Billheimer, President, Montgomery Chamber of Commerce, Montgomery, West Virginia.

Dr. J. P. McMullen Appointed to Key National Foundation Committee

Dr. James P. McMullen of Wellsburg, a past president of the West Virginia State Medical Association, has accepted appointment as a member of the National Foundation's Health Scholarship Committee for West Virginia.

The appointment of Doctor McMullen was announced last month by Dr. Thomas M. Rivers, Vice President—Medical Affairs of the National Foundation.

West Virginia Chapter, ACS, To Meet At The Greenbrier, April 14-15

The annual meeting of the West Virginia Chapter of the American College of Surgeons will be held at The Greenbrier in White Sulphur Springs, April 14-15. Dr. Ray E. Burger of Welch, the president, will preside at the two-day meeting.

Howard W. Jones, Jr., M. D.

The two principal speakers will be Dr. Mark Ravitch and Dr. Howard W. Jones, Jr., both of Baltimore. Doctor Ravitch, who is Surgeon-in-Chief, Baltimore City Hospital, will present two papers during the meeting: "Surgical Approach to the Treatment of Chronic Ulcerative Colitis," and "Esophageal Hiatus Hernia."

Doctor Jones, who is Assistant Professor of Surgery and Gynecology at the Johns Hopkins University School of Medicine, will also present two papers: "Carcinoma of the Cervix," and "Problems in Pediatric Gynecology."

Two members of the faculty at the West Virginia University School of Medicine will be among the speakers. Dr. Walter H. Gerwig, Associate Professor of Surgery, will discuss "The Hyperfunctioning Adrenal Gland," and Dr. Robert Johnson, Professor of Anatomy, will present a paper on "Surgical Anatomy of Unusual Abdominal Hernias."

The remainder of the scientific program will consist of papers by West Virginia surgeons and residents in training. The speakers and their subjects will be as follows:

"Gastrectomies."—George F. Woelfel, M. D., Huntington.

"Clinical Signs of Cervical Discs."—Frank M. Hudson, M. D., and J. Speed Rogers, M. D., Wheeling.

"Carcinomas of the Thyroid."—James E. Boggs, M. D., and David B. Gray, M. D., Charleston, and Robert W. McCoy, Jr., Keyser.

"Hodgkin's Disease of the Stomach." (Case Report)—William D. McClung, M. D., Charleston.

"Parotid Tumors."—Kenneth G. MacDonald, M. D., Charleston.

"Experiences with Moving Pictures in the Operating Room (Camera Operated Solely by the Surgeon)"—George R. Callender, Jr., M. D., Charleston.

In addition to Doctor Burger, other officers of the Chapter are Dr. Victor S. Skaff, Charleston, vice president and program chairman, and Dr. Jack C. Morgan, Fairmont, secretary-treasurer. New officers will be elected during the meeting.

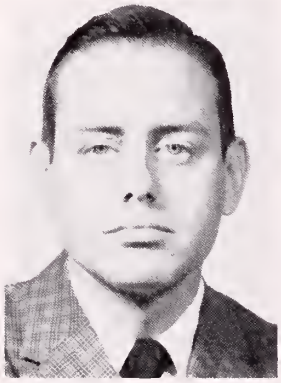
A cordial invitation to attend the meeting has been extended by the West Virginia Chapter to all practicing physicians in the state.

Further information may be obtained by writing to the program chairman, Dr. Victor S. Skaff, 4 Brooks Medical Building, Charleston 1, West Virginia.

W. Va.-Va. Anesthesiologists in Joint Meeting at Morgantown, Apr. 29-30

A joint meeting of the West Virginia and Virginia Societies of Anesthesiologists will be held at the West Virginia University Medical Center in Morgantown, April 29-30.

Members and guests will be registered both at the Medical Center and at the Morgan Hotel, beginning at 8:30 A. M. on Saturday, April 29. The societies will hold separate business meetings at 10:30 o'clock and luncheon will be served at 12:30 o'clock in the dining room at the Medical Center.



Richard E. Jones, M. D.

Dr. Richard E. Jones, Professor and Chairman of the Division of Anesthesiology at the WVU School of Medicine, will be the first speaker on the Saturday afternoon program, beginning at 2 o'clock. His subject will be "Cardiovascular Effects of Inhalation Anesthetic Agents."

The second speaker that afternoon will be Dr. Allen E. Yeakel of Philadelphia, a member of the staff of the Department of Anesthesiology at the University of Pennsylvania School of Medicine. His subject will be "Monitoring in the Operating Room."

A dinner, preceded by a social hour, will be held at the Morgan Hotel on Saturday evening.

Tour of Medical Center

The second session will be held at the Medical Center on Sunday morning, beginning at 10 o'clock. Doctor Jones will outline future plans for the Department of Anesthesiology and members and guests will be given a conducted tour of the Medical Center.

The meeting will be adjourned following luncheon at the Medical Center.

Dr. Eldon B. Tucker of Morgantown, chairman of the local arrangements committee, has announced that state physicians are cordially invited to attend the meeting.

He said that a program also has been arranged for wives of visiting physicians. There will be a tour through a local glass factory on Saturday morning and a luncheon at Mont Chateau Lodge. The afternoon program includes a bridge tournament and a visit to Coopers Rock State Park.

Dr. Logan W. Hovis of Parkersburg is president of the Society, Dr. Newman H. Newhouse of Charleston, vice president, and Dr. Harry S. Weeks, Jr., of Wheeling, secretary-treasurer.

Social drinking is a lot like spelling Mississippi—it's mostly a matter of knowing when to stop.—Wall Street Journal as quoted in The Canadian Medical Association Journal.

WVU Medical Center Scene Of Local ACS Meeting

A local meeting of the West Virginia Chapter of the American College of Surgeons was held at the West Virginia University Medical Center in Morgantown, February 17-18.

Members of the Chapter attended a lecture at the Medical Center on Friday afternoon, February 17, and the speaker was Dr. John M. Howard, Professor and Chairman of the Department of Surgery at the Hahnemann Medical College in Philadelphia. His subject was "Mass Casualties in Korea."

Two sessions were held at the Medical Center on Saturday, February 18. Following an address of welcame by Dr. Kenneth E. Penrod, vice president-medical affairs, the program was turned over to Drs. Harold I. Amory and M. L. Hobbs, who conducted a surgery-x-ray-pathology conference.

Dr. Bernard Zimmermann presented a report on the department of surgery and the remainder of the morning session was devoted to a symposium on trauma.

Following luncheon in the dining room at the Medical Center, the symposium was continued during the afternoon. Nine members of the faculty at the School of Medicine presented papers on trauma.

Charleston General Receives Grant For Cytodiagnostic Program

The United States Public Health Service has awarded a $57,000 grant to Charleston General Hospital and the State Department of Health to aid in the establishment of a cytodiagnostic training program in Charleston.

The training school, to be known as the Charleston School of Cytotechnology, Inc., will be affiliated with Charleston General Hospital. It will be located in the Medical Arts Building in that city.

Dr. Peter P. Ladewig, chairman of the department of pathology at the Hospital, will head the new school. He said that three technicians will be trained this year and possibly six in 1962. Applicants must have a minimum of two years of college training with emphasis on biology and science.

School Athletic Program Community Concern

There is currently, in our schools, too much emphasis on the intensive training of an elite group of athletes, with victory as the only goal. The bitterly competitive, "crash training" may exhaust the recipient and warp his personality. It often loses sight of the fact that intellectual pursuits have parallel demands on the time and energy of a growing human being if he is to become a mature, happy and useful adult. This intensive training of a small, select group neglects that other group of children which, most of all, needs guided physical activity.

The school athletic program is, properly, a concern of the whole community and is important, and needed, by all of our children.—Stuart S. Stevenson, M. D., in Journal, Medical Society of New Jersey.

Farm Bureau Opposes SS Approach To Medical Care of the Aged

The Social Security Health program was back before Congress this year with added strength. A bill to provide health insurance for the aged was introduced in mid-February.

Farmers are particularly concerned about this drastic increase in the Social Security program because of its socialistic nature. Farmers would be hit hard by the proposed program since they are self-employed, requiring the full burden of payment. Farmers are also concerned because they feel that their own hospitalization and insurance programs would be adversely affected by such compelling legislation.

The Kennedy Administration's plan would begin providing hospital benefits October 1, 1962, nursing home service the following year.

Estimated to cost initially $1.1 billion, the program would be financed by increasing the Social Security tax, now 4¼ per cent on self employed, by one-fourth of 1 per cent, and also by extending from $4,800 to $5,000 the annual wage base on which the tax is levied.

At the outset, an estimated 14.2 million Social Security and railroad pension retirees would be covered. Sponsors estimated that enactment of the measure, added to existing programs, would provide some form of health protection under public programs for all but about one-half million of the 16¾ million Americans 65 or older.

The benefits—subject to a maximum $90 deductible factor—would include hospital services up to 90 days, nursing home services up to 180 more days, and various outpatient hospital and nursing services. No ordinary doctor bills would be paid.

But beneath the surface there is an even greater threat to the farmer—the mushrooming threats of a welfare state. This was evident by the introduction of this health program to the 1961 Congress. It is significant that Chairman Wilbur D. Mills (D-Ark.) who, under House procedures would have the first opportunity to sponsor the bill, has made no public comment on the proposal. Mills opposed last year's counterpart.

Some Kennedy advisors, however, are predicting that committee opposition will soften if the administration takes its time, letting other elements of Kennedy's bulky economic package come to votes first.

If farmers continue to express their desire to oppose such legislation, they will have to act by letting their Congressmen know just where they stand on the issue.

Perpetual fighting is not easy. But if it means fighting for freedom, the farmer will continue to lead the way for his fellow countrymen.—West Virginia Farm News.

Living in An Age of Credit

. . . we are living in an age of credit. Adding the amount of money owed by people, businesses and public agencies today . . . the total figure is in the neighborhood of $846 billion. This is more than $4,600 for every man, woman and child in the country. . . . never have so many owed so much to one another.—Sheffield Boardman.

Carolinas-Virginias Hospital Conf. At Roanoke, April 13-14

The 31st Annual Meeting of the Carolinas-Virginias Hospital Conference, Inc., will be held at the Hotel Roanoke in Roanoke, April 13-14, 1961.

The North Carolina Hospital Association will be host for the 1961 meeting. Mr. Eugene B. Crawford, associate director of the North Carolina Memorial Hospital in Chapel Hill, is chairman of the program committee. The theme will be "Preparedness . . . . . ." in hospitals.

Lee F. Turlington, M. D.

One of the speakers on the program will be Dr. Lee F. Turlington of Birmingham, Alabama, President of the Southern Medical Association. He was installed during the annual meeting in St. Louis last November.

The new president of the conference, Miss Esther Touchberry, superintendent of the Marion Sims Memorial Hospital in Lancaster, South Carolina, will be installed at the annual meeting. She will serve through the annual meeting in 1962. Her home state of South Carolina will be host for that meeting.

Miss Touchberry will be the second woman to serve as president of the conference. The first woman to serve in that capacity was Mrs. Byrd B. Holmes, who was president in 1941.

Mr. William R. Huff of Charleston, Executive Secretary of the West Virginia Hospital Association, is the executive secretary of the conference.

Annual Rural Health Conference At Jackson's Mill, Oct. 5

The 14th Annual Rural Health Conference will be held at Jackson's Mill on Thursday, October 5, 1961.

The conference is sponsored annually by the West Virginia State Medical Association in cooperation with the Agricultural Extension Division of West Virginia University, the West Virginia Home Demonstration Council, the State Department of Health, the West Virginia Farm Bureau, and the West Virginia Congress of Agriculture.

Arrangements for the meeting are being made by Dr. Charles E. Staats, chairman of the State Medical Association's Committee on Rural Health.

AMA Delegate Turnover

Many individuals believe the House of Delegates of the AMA is a self-perpetuating body. Figures show, however, that there has been a one-third turnover in the past two years. Seventy-eight delegates out of a total of 212 (and these include the delegates from sections and government services) were new.—Massachusetts Physician.

Medical Technologists to Meet In Wheeling, April 21-22

The 13th annual meeting of the West Virginia State Society of Medical Technologists will be held at the McLure Hotel in Wheeling, April 21-22.

Mayor John Gast will deliver the address of welcome at one o'clock on Friday afternoon, April 21, and the invocation by the Reverend Hubert Barnett, pastor of the First Christian Church of Wheeling, will follow.

First Scientific Session

The following program will be presented during the afternoon:

"Medical-Legal Aspects of Blood Banking."—Howard Quittner, M. D., Pathologist, Washington Hospital, Washington, Pennsylvania.

"Public Health Problems in Ghana, Africa."—Charles Crofft, Sc. D., Ohio State Department of Health, Columbus, Ohio.

"Virological Laboratory Service Available, Methods of Submitting Specimens for Viral Studies."—Ben N. Adams, M. S., West Virginia Department of Health, Charleston.

"Quality Control." — Herman Fischer, M. D., Pathologist, St. Mary's Hospital, Clarksburg.

"A Basic Tool for Laboratory Management of Anticoagulation Therapy and Diagnosis of Hemorrhagic Disease."—Edgar Michler, M. T. (ASCP), Dade Reagents, Miami, Florida.

Second Scientific Session

The program for Saturday afternoon will be opened at one o'clock by Dr. Michael Sulka, pathologist at Weirton General Hospital, who will present an address on "Automation."

The second speaker will be Miss Carmen Runco, M.T. (ASCP), of Pittsburgh, who will speak on the subject of "The Uremic Patient from a Technologist's Viewpoint."

Symposium on Laboratory Problems

The remainder of the afternoon will be devoted to a symposium on "Laboratory Problems," with Miss Thelma Wilson, M.T. (ASCP), Beckley Memorial Hospital, Beckley, as moderator. Panelists will discuss subjects as follows:

"What Relationship Should Exist Between the Administrator and the Laboratory Personnel."—L. B. Dillehay, Administrator, City Hospital, Bellaire, Ohio.

"Should Purchasing be Left Entirely to the Discretion of the Laboratory?"—S. G. Nazzaro, Assistant Administrator, Wheeling Hospital, Inc., Wheeling.

"What is the Solution to the Ever-existing Problems Between the Laboratory and other Hospital Personnel."—Werner A. Laqueur, M. D., Pathologist, Beckley Memorial Hospital, Beckley.

"Wages and Personnel Benefits in the Laboratory."—Mary Lou Bush, M.T. (ASCP), Berkeley Springs.

"Is There an Answer to the Internal Problems Existing Among Laboratory Personnel."—Betholene Love, M.T. (ASCP), West Virginia Medical Center, Morgantown.

Speakers will be limited to ten minutes, with two minutes being allotted for comment from the panelists on topics discussed. Questions from the floor will be directed to individual speakers by the moderator.

The annual dinner, which will follow a social hour, will be held at the McLure on Saturday evening. The speaker will be Dr. Werner Laqueur, pathologist at Beckley Memorial Hospital. Dr. M. L. Hobbs, head of the department of pathology at the West Virginia Medical Center in Morgantown, will be the toastmaster.

The last event on the Saturday evening program will be a dance. Music will be furnished by George Thomas and Five Sharps.

Miss Esther Levine of Fairmont, who is the president of the State Society of Medical Technologists, will preside at the two-day meeting.

Further information concerning the program may be obtained by writing Mrs. Jean Kloss, Public Relations Chairman, The West Virginia State Society of Medical Technologists, Wheeling Hospital, Wheeling, West Virginia.

The Torch

The Isles of Greece, gilded by the eternal summer attributed to them by Byron, and others, have no exact counterpart in the imagination. Nor can it be said that all except their sun is set so long as physicians have the ideals, the practice and the teachings of Hippocrates as a factual example of what the Aegean islands have been capable of producing.

And yet little is known about the personal life of Hippocrates except that he was the son of Heracleides, a physician, and was reputed to have descended from both Aesculapius and Heracles, the hero of mythology. He almost certainly studied and advised his patients and taught his students at Meropis on the eastern end of Cos, under a plane tree that is said still to exist, aged in the wood. Regardless of whether Hippocrates ever sat beneath its branches, an ancient plane tree sands today in the right locality, and the gavel of the British College of General Practitioners was made from some apparently dispensable part of it.

One of the most ambitious undertakings ever brought to a successful conclusion by a distinguished doctor afield is a recently published historical novel of the early years of Hippocrates on his native island, after his return from Macedonia as the coming young man in medicine. It is a story of his observations on disease, and his growing fame, but especially of his love for the attractive daughter of a rival physician of Cnidus, and its predictable outcome.

It was a difficult task to which Wilder Penfield set himself—for an internationally distinguished neurosurgeon, still active in the scientific studies peculiar to his profession, to make a human being out of the most idealized figure in medical history. But Doctor Penfield accomplished it in *The Torch*, even as he has already recreated Abram in flesh and blood in his first novel, *No Other Gods*.—The New England Journal of Medicine.

The West Virginia Medical Journal

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Cardiac Arrest*†

Brian Blades, M. D.

The most important consideration in a discussion of cardiac arrest is its prevention. It is important therefore to review the causes of cardiac arrest and ventricular fibrillation so that the proper preventive measures may be taken.

Lack of oxygen for the myocardium is the primary cause of cardiac arrest. The ability of the myocardium to withstand temporary depletion of oxygen will, of course, depend upon the age of the patient, a previously damaged myocardium, and other general factors. Oxygen deficit can be caused either by impaired ventilation or impaired circulation. Disturbances in ventilation will eventually result in anoxia, anoxemia and myocardial anoxia and, finally, in fibrillation of the ventricles which, if not relieved, will terminate in cardiac standstill and death. Identical mechanisms exist if the circulation is inadequate to carry oxygen to the myocardium (Figure 1).

Maintenance of Circulation

Maintenance of circulation depends upon two factors: adequate oxygenation of the blood and the circulating blood volume. This factor becomes particularly important during surgical operations in which patients may have rapid alterations in blood volume because of hemorrhage. Another and sometimes neglected factor in the maintenance of circulating blood volume is the gentle handling of tissue during surgical procedures.

Impaired Ventilation

Impaired ventilation probably is a more common cause of cardiac arrest than sudden severe hemorrhage. Any obstruction of the airways, whether it be in the trachea from an improperly placed intratracheal catheter, or from a tumor, or from accumulated blood or mucus, will decrease pulmonary ventilation. The same effect will be present if sufficient oxygen concentration is not employed with an anesthetic agent. An overdose of any drug, particularly if given before operation, may result in depression of ventilation and respiration and have the same basic effect.

The Author

- Brian Blades, M. D., Professor and Head of the Department of Surgery, George Washington University School of Medicine, Washington, D. C.

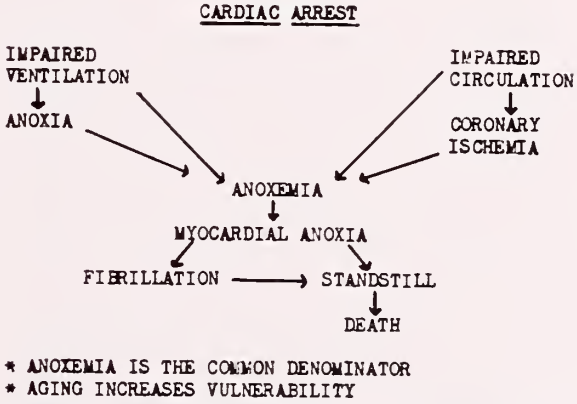

Figure 1. A diagrammatic presentation of the basic mechanisms involved in the production of cardiac arrest.

Prevention of Cardiac Arrest

Since most cases of cardiac arrest occur in the operating room or shortly after an operation, prevention in these circumstances will be discussed. It should be stated, however, that the same principles apply to the seriously ill patient who may be either on the surgical or medical wards.

*Presented before the Fifth Annual Potomac-Shenandoah Valley Postgraduate Institute at Martinsburg, W. Va., October 21, 1960.

†From the Department of Surgery, The George Washington University School of Medicine, Washington, D. C.

Submitted to the Publication Committee, October 26, 1960

The tremendous importance of a complete history and physical examination cannot be overemphasized. The availability of many valuable and important laboratory procedures perhaps has resulted in failure to appreciate the importance of a clinical evaluation. For example, the patient's own account of his ability to undergo exercise or ordinary physical tasks is sometimes much more important in evaluating the cardiac reserve than the most elaborate electrocardiographic studies. Obviously, if a history of heart disease is known or suspected, exercise tolerance tests, electrocardiograms and other more precise studies should be undertaken.

The fact that the incidence of cardiac arrest appears to be no greater in the so-called poor risk patient than in some apparently good risks suggests strongly that all the precautions to prevent cardiac arrest may be neglected unless some pre-existing disease has been detected to caution the surgeon and anesthesiologist.

Preoperative medications are of great value to decrease apprehension and lower metabolism, but a huge dose is not necessary for these purposes. Excess preoperative medication combined with a rapid induction of general anesthesia without a sufficient amount of oxygen may result in anoxemia and hypoxia. This is particularly true in procedures in which the airways may be compromised; the tragic complication of cardiac arrest during tonsillectomy usually has resulted from these circumstances.

Overloading the circulatory system with blood or fluid during or after the operation may be distastrous, and this is particularly true in patients with impaired pulmonary function or heart disease.

The patient should remain in the operating room until the blood pressure, pulse and respiration are at normal levels. He then should be kept in the recovery room under close observation until he is awake. In the recovery room, particular attention should be given to suctioning out the trachea and keeping the airways clear. Postoperative cleansing of the airways with suction applies to all types of operation and without regard to the anesthetic agent employed.

Diagnosis of Cardiac Arrest and Ventricular Fibrillation

The absence of a palpable pulse and audible blood pressure should be regarded as evidence of cardiac standstill or ventricular fibrillation. An absolute differential diagnosis of these two conditions before the heart is visualized is possible only if an electrocardiograph is attached to the patient at the time. Delay to obtain an electrocardiographic tracing to determine this point would be disastrous. If thoracotomy is performed and the heart exposed it usually is easy to detect ventricular fibrillation as opposed to cardiac standstill. This is of no great practical importance, however, since the initial treatment for the two conditions is the same. Artificial respiration with 100 per cent oxygen and cardiac compression to maintain circulation may be employed for both conditions.

Once ventilation is established with a high concentration of oxygen, and cardiac compression carried out, there is no great urgency in applying electroshock for the treatment of fibrillation if it is present. In this connection it should be emphasized that electroshock will not be effectual if the myocardium is cyanotic. Compression of the heart and artificial respiration with oxygen must be performed to supply the heart muscle with adequate oxygen concentration before electroshock is effective.

Treatment of Cardiac Arrest

Closed Chest Cardiac Massage.—Kouwenhoven and his associates[1] recently described a method for closed chest cardiac massage based on experimental observations and clinical experience. The most important feature of the technique is that it can be applied whenever and wherever the emergency arises and in circumstances in which thoracotomy would be impossible or extremely hazardous. It appears that the method will have particular importance in the wards or in the emergency room and that it can be applied immediately even if it is necessary to perform thoracotomy. In their report it is recorded that twenty patients varying in age from two months to eighty years have been treated with the closed method; all of them were resuscitated and at the time of the report fourteen were alive without central nervous system damage.

The method consists of compression of the anterior chest wall as vigorously as possible, with the patient in supine position with rigid support. Maximal compression is accomplished by placing the heel of one hand over the sternum just cephalad to the xiphoid with the other hand on top. Compression is applied approximately sixty times a minute with care being taken to lift the hands to permit full expansion of the chest. Mouth to mouth respiration should be given until oxygen can be delivered through an intratracheal catheter. A closed chest alternating current defibrillator also has been developed by the authors and has been utilized in cases in which ventricular fibrillation developed (Figure 2).

Open (Thoracotomy) Treatment of Cardiac Arrest.—Attempts to resuscitate the heart by the

open method without proper equipment immediately available have accounted for a number of tragedies. Not infrequently when the chest is opened after the initial diagnosis of cardiac arrest, the heart may be found to be beating with a certain though limited degree of efficiency. If equipment to deliver oxygen is not available in these circumstances, the patient probably will die or become decerebrate. Thoracotomy and cardiac compression with mouth to mouth insufflation is justifiable under emergency conditions or if the other emergency equipment is not immediately available. In general, however, efforts at open cardiac resuscitation without oxygen or means to deliver it may result in death by suffocation, or in a decerebrate human if the patient is one of the few who survive.

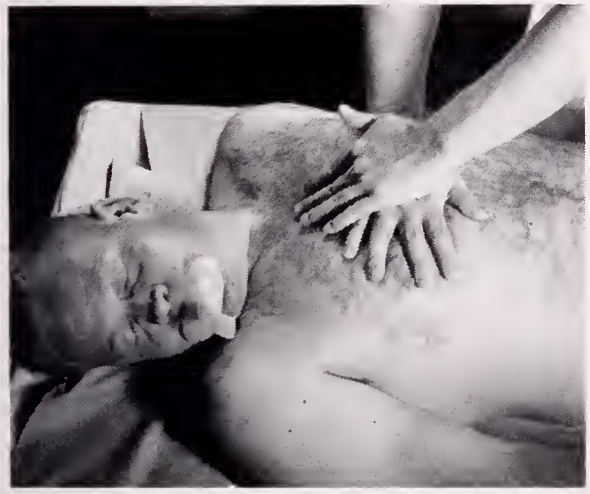

Figure 2. Position of the hands for the performance of closed chest cardiac massage.

The equipment necessary for the treatment of cardiac arrest should be immediately available in every operating room, also in those locations where operative diagnostic procedures such as cystoscopy, bronchography and the like are to be performed.

Basic equipment consists of an anesthetic machine for artificial respiration equipped with endotracheal tube, face mask and oxygen, and the necessary instruments to perform a thoracotomy. A defibrillator and electroshock apparatus and drugs which are occasionally useful in the treatment of cardiac arrest or ventricular fibrillation should be available. Sterile syringes and needles in duplicate sets for injection of drugs into the ventricle should be packaged with the set.

If the diagnosis of cardiac arrest is made, treatment should be started immediately. Successful resuscitation of the heart has been reported after what was thought to be a considerable length of time after the heart stopped but, in general, a delay of more than three or four minutes may result in disaster. It is extremely difficult to evaluate time intervals unless an electrocardiogram is available from the onset of the arrest.

When the open method is employed, an incision should be made in the fourth or fifth anterior interspace on the left and no time should be taken to prepare the operative site. If caridac arrest exists there is practically no bleeding and the heart can be exposed immediately. The organ should be compressed vigorously to maintain its pump-like action and one must make certain that the heart is empty to give it an opportunity to fill with each compression. If an endotracheal catheter is already in place 100 per cent oxygen should be delivered immediately; if not, oxygen can be given through a tight fitting face mask until an endotracheal catheter has been inserted.

The term "cardiac massage" is a poor one since compression of the heart consists of much more than massage and is a tiring maneuver. If it is to be maintained for a long time, a team of two or three is needed to relieve each other when the hands of the operator become fatigued.

Drug Therapy in Cardiac Arrest.—Certain drugs are important and helpful in the treatment of cardiac arrest or ventricular fibrillation, but these drugs are specific and if used injudiciously are extremely dangerous.

The most frequently misused drug is epinephrine. It is specific for restoration of tone of the heart muscle, but if given in cases of ventricular fibrillation or employed when the heart is flaccid, sluggish and cyanotic the condition may become more severe. The dose of epinephrine should not exceed 1 ml. of a 1/10000 solution and should be given directly into the chamber of the ventricle if it is to be used. Before giving epinephrine the heart should be compressed for a sufficient period of time to make the myocardium pink and well oxygenated.

Calcium chloride is used for the same purpose, namely, to increase myocardial tone, and probably is safer than epinephrine. Five ml. of a 1 per cent solution should be given directly into the ventricular chamber.

Recent reports[3] indicate that intravenous isuprel is useful in the treatment of cardiac arrest. The drug has a central action which increases the contractile force of the heart and in addition has a peripheral vasopressor effect.

Procaine is the drug of choice to decrease myocardial irritability and may be useful in the treatment of ventricular fibrillation, combined with electroshock and cardiac compression.

If there is ventricular fibrillation, electroshock should be applied as soon as the myocardium is pink. The defibrillator should be capable of delivering a minimum of a sixty cycle alternating current of 100 to 220 volts and one or more amperes of current flow. An amperage flow below 0.8 may cause ventricular fibrillation. The apparatus should have a control switch which will operate at 0.5 seconds to prevent damage to the myocardium. The electroshock should be delivered, and in good circumstances the heart probably will come to a standstill. Compression then should be continued until the heart has resumed normal sinus rhythm. It often is necessary to deliver more than one shock to the heart if it is fibrillating and after the initial try rapid shocks of two or three should be employed.

Protective Effects of Hypothermia Following Cardiac Arrest

Experimental and clinical experiences reported by Williams and Spencer[2] have established the value of hypothermia as a protective measure for the central nervous system following cardiac arrest. They report 4 cases in which cardiac arrest developed outside the operating room and in which there was evidence of neurological injury. After resuscitation the patients were treated with hypothermia 30 C. to 34 C. for seventy-two hours. In one case, there were moderate residuals but in the other three there was complete recovery. In their experimental studies they demonstrated that in dogs a circulatory arrest of ten minutes could be tolerated if the animal was protected with hypothermia. The value of hypothermia is due largely to the reduction of cerebral swelling after circulatory disturbances. In any case in which there is not prompt resuscitation of the heart and in which there are dangers of neurological residuals, hypothermia should be employed.

Conclusions

The most important consideration in cardiac arrest is its prevention. Basically, the cause of cardiac arrest or ventricular fibrillation is lack of oxygen for the myocardium.

Methods of prevention and treatment are discussed.

References

1. Kouwenhoven, W. B., Dr. Ing., Jude, J. R. & Knickerbocker, G. G.: Closed Chest Cardiac Massage, J. A. M. A. 173:1064-1067, 1960.
2. Williams, G. R., Jr. & Spencer, F. C.: The Clinical Use of Hypothermia Following Cardiac Arrest, Ann. Surg. 148:462, 1958.
3. MacCordy, C. R.: Personal communication.

A Privilege – Not a Right

The motor vehicle undoubtedly is the greatest single force in the economic and cultural growth of the world today. Unfortunately, the automobile has also become the most lethal instrument ever placed in the hands of the civilian population. The statistics totaling 38,000 deaths and more than 1,400,000 disabling injuries a year emphasizes this horrible fact. Even war is less destructive. In all of the armed conflicts in which this Nation has participated, less than one million men have been killed, while the automobile counted its one millionth victim ten years ago.

If the seriousness of the problem as it exists were to be realized by the public, it could be aroused from an indifferent complacency to demand regulations which would salvage many thousands from death and crippling injuries. The very human trait that such things only happen to the other fellow denies many benefits to our present programs of education despite the eye-catching slogans devised.

Nevertheless, the basic solution to our national public health problem of highway destruction lies in more education. The present generation of drivers may be lost to such a program, but we must plan for the future. There are excellent State-supported driver training programs functioning at the teen-age level in our schools. These must be broadened and encouraged. If time in the classroom is a factor in this hurry-up of the Sputnik age, courses in art, music and home economics should yield to driver training. Similar courses should be required for the public not now in school—not only for beginners but for those whose licenses have been in jeopardy or revoked.—Detroit Medical News.

Principles of Treatment of Diabetic Acidosis*

Perry S. MacNeal, M. D.

THE biochemical changes which take place in diabetic coma are so profound and spectacular that they occasionally confuse the therapeutic problem. Dramatic aberrations of the blood sugar, blood viscosity and the pH of the blood, and the concentration of various ions have received more than their justifiable degree of concern. Whereas these are interesting scientific observations, they contribute little to the resolution of a medical emergency. It is the purpose of this paper to direct the attention of the clinician to those laboratory findings which are specific guides to therapy in order that it may not be diverted by dramatic but unimportant facets of a relatively simple problem.

Diabetic acidosis is produced by a deficiency of insulin, either relative or absolute. A relative deficiency occurs when, although the diabetic patient continues to take his usual dose of insulin, his requirement is increased. This occurs rapidly (a matter of hours or days) in the presence of febrile infections, or gradually (weeks or months) by persistent gluttony. Errors in judgment occasionally contribute to the phenomenon. Thus when, in an unstable "juvenile type" diabetic child febrile gastroenteritis with vomiting develops, the physician, fearing hypoglycemia because of the decreased food intake, may advise reduction of the insulin dose. In this situation, when the need for insulin actually is increased by the fever, a reduction of insulin dose may well precipitate diabetic coma.

In the more gradual onset the patient may produce persistent hyperglycemia by overeating. This will gradually reduce his tolerance to glucose and, if the insulin dose remains constant, may well lead to ketoacidosis.

In either type the prevention of acidosis is achieved by more careful medical supervision. The febrile child should be given one-half of his usual dose of insulin (regardless of his ability to eat) at the usual hour. He should then be urged to consume sweet liquids in small amounts at frequent intervals. Four hours later he should receive one-half of the remainder of his insulin. The urine is then tested every four hours and an amount of insulin approximately equal to one-quarter of his usual dose is given at four-hourly intervals as long as glycosuria persists. If massive glycosuria persists these doses should be supplemented with additional increments of regular insulin. If the febrile episode persists more than twenty-four to forty-eight hours the diabetic patient should be cared for in a hospital on a program of four equal feedings and four doses of regular insulin sufficient to control the situation.

The patient whose loss of tolerance is due to overeating can always be kept out of acidosis if he will follow the basic principles of diabetic management and submit himself to regular supervision. Once the full blown syndrome has developed, however, his treatment must be as vigorous as that of his more unstable colleague.

The diagnosis of diabetic acidosis usually is simple and the dehydration, hyperpnea, acetone odor and somnolence are too well known to this group to require emphasis here. Confusing situations, however, occasionally do occur. A non-diabetic patient with a cerebral hemorrhage may show glycosuria due to mid-brain damage, ketonuria due to starvation, and respiratory disturbance secondary to the vascular accident, thus closely imitating diabetic acidosis. A diabetic patient in acute alcoholic intoxication may present a similar problem. In situations of this type, detection of the concentration of acetone in the blood plasma is extremely helpful.

Blood Plasma Acetone Test

The test is simply and quickly performed. Four drops of blood plasma (or serum) are placed in a test tube (tube #1). Two drops from this tube are added to two drops of water in a second tube. Two drops from this tube are similarly diluted in tube #3. Two drops from tube #3 likewise are placed in tube #4 with an equal volume of water. After mixing, one or two drops from each tube are placed on separate mounds of acetone test powder (Denver Chemi-

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cal Company) and the color reaction graded one to four plus, depending on the speed of its development and the depth of the color. Any patient who is unconscious due to diabetic acidosis will give a strong four plus reaction with the undiluted plasma and at least some reaction in the 50 per cent concentration. If the test is not strongly positive in the first tube a further search must be made to reveal the cause of the coma. Strongly positive reaction for acetone can be found in the *urine* of patients who are not in severe acidosis. A strongly positive test for acetone in the *urine* is, therefore, insufficient evidence for a diagnosis of diabetic coma.

Most of the danger to the patient in diabetic coma is secondary to excessive combustion of fat and the consequent accumulation of the toxic end-products of this lipid catabolism—the ketone bodies. The fundamental principles of treatment, therefore, are:

1. Suppress completely the metabolism of fat.
2. Correct the dehydration.
3. Replace the lost sodium.
4. Correct the potassium imbalance.
5. Avoid hypoglycemia.

Suppression of fat metabolism requires only that an excess of insulin and sugar be present in the circulating blood. Since there is already marked hyperglycemia only insulin need be added in the first few hours of treatment. To this end it is our custom to administer 100 units of regular insulin intravenously and 100 units subcutaneously as soon as the diagnosis is established. An additional 100 units of regular insulin are given subcutaneously every hour until the plasma acetone (being tested every hour as described above) shows a significant drop in concentration. At this time, insulin may be withheld for two or three hours in order to avoid hypoglycemia. The insulin should then be resumed at intervals of four hours based on subsequent urinalyses. An alternative method, to avoid the excessive number of venipunctures, is to continue the hourly doses of insulin until the urine (being tested every hour) becomes free of acetone. This usually requires that the insulin be continued longer at hourly intervals, than is the case if one reduces the dose when the plasma acetone first begins to diminish. It may, therefore, theoretically, at least, subject the patient to greater risk of hypoglycemia. The risk, however, can be eliminated by adding glucose to the intravenous infusion (see below) as soon as the urine sugar drops from four plus to two plus. This reduction in glycosuria will almost always take place a considerable length of time before the urine becomes free of acetone. Therefore, if one intends to continue the large doses of regular insulin at hourly intervals until the ketonuria disappears it will be essential to add enough glucose to the intravenous infusion to maintain a detectable glycosuria and thereby avoid any risk of hypoglycemia. By the time the urine becomes free of acetone the patient usually will be conscious and able to take sweet liquids by mouth. At this time the insulin can be reduced to a four to six hour schedule and the blood sugar can be supported by sweet liquids given in small amounts at frequent intervals. When the situation has become sufficiently stable, restandardization should be undertaken. The basic principle, by either technique, remains to give an excess of insulin in order completely to suppress the metabolism of fat and at the same time protect the patient from hypoglycemia by the timely and appropriate administration of intravenous glucose.

Correction of the dehydration requires the infusion of fluids of proper type in appropriate amounts. The hematocrit is the best guide to this part of the problem. If dehydration is severe (hematocrit 55 or above) and if the heart and kidneys are believed to be in good condition, one liter of normal salt solution may be given during the first hour. If the hematocrit remains above 50, a second liter may be given in the second hour. This almost certainly will return the hematocrit to normal (45) and thereafter fluids should not be given faster than forty-five drops (3 cc.) per minute unless a strong indication (hypoglycemia, hypokalemia) develops. Whatever solutes are required should be given in appropriate concentrations to meet the need without increasing the total volume of intravenous fluids administered.

Replacement of the lost sodium usually is promptly accomplished, in the presence of normal heart and kidneys, by the above infusion of normal salt solution. When ketoacidosis is severe, however, (as evidenced by air hunger or a carbon dioxide combining power of less than 8 m Eq.) extra sodium, in the form of 1/6 molar lactate should be given to expedite the recovery. To this end, we commonly add sufficient sodium lactate to the first liter of intravenous saline to make this solution contain 1/6 molar sodium lactate as well as the original 0.85 per cent sodium chloride. The need for additional lactate in the second flask should be judged by evidence of continued air hunger or a carbon dioxide combining power remaining below 10 m Eq. This need very rarely occurs. If, however, an excess of lactate is given, the patient may pass from acidosis to alkalosis very quickly. It is, therefore, our practice to give only enough lactate to relieve the actual air hunger, not attempting to

restore the carbon dioxide combining power entirely to normal.

Correction of potassium imbalance is extremely important since most of the late deaths in this disease (eight to sixteen hours after the beginning of treatment) probably are due to cardiac arrest secondary to depletion of the plasma potassium. As diabetic acidosis develops, the potassium ion diffuses out of its normal intracellular habitat into the serum and is permanently lost by excretion in the urine. As the situation is corrected by the measures described above the potassium returns to the cells leaving a gross deficit in the serum. Hypokalemia commonly produces cardiac arrest. To avoid this, extra potassium should be administered starting at about the sixth hour in the program as outlined above. This can be achieved by adding potassium chloride 2.2 Gm. to one liter of the intravenous solution which is being given at that time. If the patient is able to take liquids by mouth, there is no reason why the potassium cannot be given by mouth and it is our custom to give 1 Gm. of potassium citrate or potassium chloride every two hours for six doses after the sixth hour of therapy as an alternative program to adding it to the intravenous solution. Potassium should be given carefully and checked by actual quantitative determinations of its concentration in the serum if the patient is not secreting urine freely since an excess of potassium in the blood may be harmful. Very generally speaking, the electrocardiogram can sometimes be a guide to the potassium level in the blood serum. The T-wave in the third limb lead usually gives an index to this concentration. If the T-wave is high, the serum potassium is usually high. If it is flat or inverted, hypokalemia probably is present and the prompt administration of extra potassium is called for.

Avoidance of hypoglycemia is absolutely essential and the danger, if insulin is given with the enthusiasm that we recommend, is considerable unless adequate provision is made to maintain moderate hyperglycemia. It should be remembered that hyperglycemia of moderate degree is harmless, that an excess of sugar does not produce or aggravate ketoacidosis, but that hypoglycemia may be fatal or produce permanent brain damage. Therefore, as soon as evidence of a drop in the blood sugar (diminishing glycosuria or a blood sugar level below 200 mg.%) occurs, sugar must be added to the total intake in adequate amounts to maintain moderate hyperglycemia and glycosuria until ultimate restandardization of the patient's condition can be undertaken. If the patient can swallow and retain sweet liquids, this is a satisfactory route but generally the need for extra glucose develops before the patient has aroused sufficiently to make oral administration practical. In this situation, at about the sixth or eighth hour of treatment (by which time sufficient sodium chloride and sodium lactate have already been given), the intravenous solution should be changed from normal salt solution to either 5 per cent glucose in normal salt solution or 10 per cent glucose in distilled water, depending on estimation of the relative need for salt and sugar.

Laboratory tests and observations fundamental to the control of this program are:

1. Urine sugar and acetone tests every hour, not only for diagnosis, but for control of the insulin and intravenous glucose administration. To this end we customarily place an indwelling catheter in the bladder in order that the urine specimens may be collected at appropriate intervals. Because of the danger of infection of the bladder due to the indwelling catheter, we urge very strongly that some appropriate antibiotic be administered at the same time in an effort to prevent this complication. These bladder infections are easier to prevent than they are to cure.

2. The plasma acetone should be tested every hour not only for diagnosis but also for control of the insulin dose.

3. The hematocrit should be tested during the first two or three hours while the initial attempts to correct dehydration are taking place.

4. Hyperpnea should be checked carefully as an indication for supplementary lactate. The plasma carbon dioxide combining power is more accurate, of course, if conveniently available.

5. The electrocardiographic tracing may help measure the aberrations of potassium in the blood serum.

Thus it can be seen that an understanding of the perversions of physiology that take place, an awareness of the available means for their correction, and a system of simple guides to treatment make the management of diabetic acidosis possible without an excess of laboratory aid.

. . . there are no gains without pains.

BENJAMIN FRANKLIN.

Significance of Routine Urinalysis*†

George E. Schreiner, M. D.

URINALYSIS was the first known clinical laboratory examination and the subject occupied a great part of early books on scientific medicine. Its close association with diagnostic medicine was recognized over a century ago, as demonstrated by the words of Beale,[1] "A few months' careful study in the wards of a hospital and in the dead house will serve to convince any unprejudiced person that the nature of renal disease may be diagnosed in many cases by the microscopical character of the urinary deposits."

The purpose of the present report is to review the technique of thorough urinalysis and to reiterate its worth. Urinalysis has the highest practical yield of any laboratory test done in office or hospital and all too often is delegated to the responsibility of the most poorly trained technician in the laboratory, the beginning medical student, or the uninterested office assistant.

Urine Collection

Before reviewing briefly the features of the good routine urinalysis, we must pay attention to the way the urine is collected. A story will serve to emphasize the common pitfalls. It is 5 A. M. in a large community hospital. The day nursing supervisor has exercised her power by decreeing that all morning urines should be collected on the night shift. The night nurse has two hours of temperatures and paper work to get ready for the day shift, so she starts the lowest paid employee out on urine collections. He takes a bed pan, often rinsed in tap water and hung up moist in a warm room where bacteria proliferate, and slides it under a rudely awakened patient. This maneuver manages to collect lint, dust and spores from the rumpled bed clothes, and the subsequent anatomical position is particularly effective in obese women with vaginal discharges. Sitting on a bed pan serves to squeeze the vaginal content anteriorly where they are most easily washed off into the urinary specimen. The bed pan is then set on a radiator, windowsill or counter top, for the messenger must continue his appointed rounds.

After a delay of 1½ to 2 hours, during which time formed elements have sedimented and the bacteria have multiplied, the next lowest paid employee pours a specimen off the top and neatly washes the casts down the drain. She pours the specimen into a bottle which may or may not be chemically clean and rarely is bacteriologically clean. Some time later when an orderly is going toward the laboratory, the specimen is left on a bench, about 9 A. M.

The new laboratory girl who is being broken in on the urine bench, lines up all the bottles, makes out all the slips and does all the tests which don't change with time. Then she pours a little off the top of the well sedimented bottle into a conical test tube, puts them in an overheated centrifuge and goes out for a coffee break. In the post-digestive lethargy she gives the tube a desultory flick which may or may not dislodge the sediment button, and she examines one drop in a dirty microscope through a cloud of cigarette smoke. Since all the urines have incubated bacteria, the red cells have been lysed in the heat and the casts have been lost by the multiple decantations, a girl has to put down something. Probably the most acceptable report is "occasional white cells" or "rare hyaline casts." Another diagnostic opportunity bites the dust!

Urinalyses should be done only on clean catch, midstream or split specimens taken in a standing position into a sterile container and examined immediately. Patients should never be catheterized for routine urinalysis. In females the number of vaginal epithelial cells is a good index of contamination.

What do we look for in a good urinalysis? The first consideration should be the volume of urine passed by an individual, which requires timing of the collected urine sample.

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Volume and Rate of Urine Formation

The average rate of urine formation in an American in a slightly dehydrated state is from 0.6 to 1.2 ml./min. This usually is distributed so that ⅔ of the volume is passed in the daytime and one-third at night, for a day to night ratio of 2. Night volume diminishes because of a drop in filtration rate and an antidiuresis due to lack of water consumption. The patient is said to have polyuria if there is an increased daily volume, where the urine is being formed at a rate greater than 2 ml./min. Oliguria exists if there is less than 400 ml. produced per day, and anuria if there is less than 100 ml. produced per day. Nocturnal frequency means getting up too often. Nocturnal polyuria means a decreased day to night ratio with a larger share of the 24-hour volume being produced at night. This situation is common in congestive failure of any cause, chronic renal disease, early stages of essential hypertension and sprue.

Appearance

The second feature of the urinalysis is the appearance of the urine. Fresh urine is clear. Cloudy urine may represent pus, bacteria, mold, crystals, blood or artifacts. Urate crystals tend to precipitate out from acid urine. Phosphates precipitate from alkaline urine. Urea splitting infections such as Proteus make the urine alkaline on standing, and this change occurs particularly with urine that contains enteric bacteria and that is left at warm temperatures for long periods of time, the latter a common hospital occurrence. Figure 1 shows the amount of purulent sediment which may be seen in pyohydronephrosis.

Figure 1. Amount of purulent sediment which may be seen in pyohydronephrosis.

The next information obtainable is that of color. Red urine should make one suspicious of fresh blood, hemoglobin or vegetable pigments such as beets. Coffee-colored urine means old blood, yellow foam is suggestive of bile, port wine urine is seen with porphyrin excretion, brown to black with melanin or alkapton excretion and bizarre colors are often seen with urinary analgesics such as Pyridium (Rx), with dyes, and with a variety of drugs. We have encountered two instances of purple urine (after standing) in patients receiving chloramphenicol.

Concentration

The first laboratory examination of the urine involves concentration, and the most common method for this is the use of a calibrated urinometer which should be kept clean, should be used at the temperature at which the urinometer has been calibrated (our particular one is at 25 C.). It should also be used in a cylinder of the proper size. Specific gravity is best done on the supernatant obtained after centrifuging the urine for sediment. The temperature correction involves one number in the third place for each 3° centigrade variation from the standard. Each Gm. per cent of protein contained in the urine elevates the specific gravity by approximately 0.003.

A patient is said to have hyposthenuria when the specific gravity is less than 1.009, isosthenuria when it is in the range of 1.009 to 1.011, and hypersthenuria when it is over 1.012. Urinary specific gravity measures the density of solutes and can be thrown off by the presence of any abnormal chemical of a high density. The most common sources of error are the organic iodides such as those used for gallbladder determinations or intravenous urograms and glucose. Molecular relationships of osmolality can be measured by means of a depression of freezing point. An isosmotic urine is one in which the osmotic U/P ratio approximates 1 and the urine osmolality in most patients in this situation will be around 300 mOsm/l. A hypertonic urine with dehydration may produce osmotic U/P ratios up into the range of 3 and 4, with urine osmolalities of 900 to 1400 mOsm/liter.

The total solid or TS meter recently devised by Dr. Arnold Wolf represents a new method for the determination of urinary solutes. It is essentially a calibrated refractometer and is capable of reading a solute content of a single drop of urine (Figure 2). The inherent advantages of this refractometer are that it is available for small urine samples, it is rapid, it is direct and it is unaffected by temperature. All loyal members of the "Society for the Abolition of Hackneyed Excuses" will undoubtedly cheer at the news that the letters "QNS" soon may be eliminated from the medical vocabulary.

Contrary to the patient's usual opinion, there is no good correlation between color and concentration in the urine. For example, a dark

urine of low specific gravity may be seen after hemolytic reaction, while a light urine of high specific gravity may be seen in diabetic patients with glycosuria.

Figure 2. Calibrated Refractometer.

pH

The pH of the urine may be checked by litmus, nitrazine, hydrion or other indicative papers. Most Americans are on an acid ash diet, and the average pH is 6.0. There may be an alkaline tide after a large meal or when urea splitting organisms are present in the urinary tract. Patients with consistently alkaline urine are suspected of abnormal dietary intake, ingestion of alkali, renal tubular disease such as renal hyperchloremic acidosis or situations favoring renal calculus formation.

Reducing Substances

Reducing substances in the urine are the key to a number of specific techniques which are commonly referred to as sugar or glucose testing.

Actually, there is a wide variety of reducing substances found in human urine. Benedicts reagent, for example, may be reduced by glucose, fructose, pentose, lactose, galactose or high urinary concentrations of creatinine, ascorbic acid and uric acid. Many drugs such as Streptomycin and preservatives such as formaldehyde also act as reducing agents.

There has been a recent revival of interest in tape testing for reducing substances in vaginal secretions and in sweat.

Glycosuria should, of course, be suspected as diabetes mellitus until proven otherwise. It may be physiological, as after exercise, alimentary after high sugar intake, or it may be due to impaired renal tubular absorption as in renal glycosuria, severe nephrosclerosis, pregnancy, the de Toni-Fanconi syndrome or focal renal tubular disease. Galactosuria appears as a pediatric syndrome. Lactosuria appears in the latter part of pregnancy or in the lactating female. Fructosuria may follow fruit or artichoke ingestion or a metabolic defect. Pentosuria may be dietary or essential when the sugar is usually L-xyloketose. Ribosuria is a less rapidly reducing sugar and may be seen in muscular dystrophy.

Protein

From a renal viewpoint, perhaps the most important substance determined in the routine urinalysis is the presence or absence of protein by qualitative tests. It often is referred to as albuminuria, but actually there are a number of proteins found in human urine. In addition to albumin, they include globulin, pseudoglobulin, proteose in allergic states, fibrinogen, tissue protein from cells, hemoglobin and Bence-Jones protein, particularly in multiple myeloma. Figure 3 (next page) shows the most commonly used method of sulfosalicylic acid precipitation with the grading of the tubes quantitatively from a trace to 4+. There is little point in accurately measuring the concentration of a random urinary sample which is not timed because such concentrations are meaningless without reference to the state of hydration of the patient and can be changed simply by the drinking of water. When rates of protein excretion are desired it is best to collect at least a 12-hour specimen and to measure the volume of precipitate in a Stafford Shevsky tube as shown in Figure 4.

How common is proteinuria? In military studies proteinuria was found in 2 per cent of army inductees, 3 per cent of naval applicants. It was also found in 5.32 per cent of 20,000 students at the University of Minnesota, 16 per cent of West Point cadets and 100 per cent of those who finished a marathon race. If all the Americans in the recent census had a urinalysis today and the conservative 3 per cent experience proved true, then 5,400,000 people in the country have to face the medical problem of interpretation of proteinuria. To approach this problem intelligently the physician must have at his finger tips a thorough knowledge of the causes of proteinuria. These can be most succinctly stated in the brief classification which is shown in Table 1. Because so many of the chemical tests have been made available in bedside form, we have appended Table 2, giving the specific problems related to each test, their sensitivities, false positives, false negatives and the cost (Table 2 on page 164).

Figure 4. Measurement of the volume of precipitate in a Stafford Shevsky tube.

Microscopic

Unquestionably the most valuable part of the urinalysis is the microscopic examination, which must be done on fresh urine and which should be done by the physician himself or by someone trained to look for pertinent morphologic elements in relation to the suspected diagnosis. Positively no one can do this as well as the physician who has taken the history and made the physical examination, and this is the most ideal routine for office practice. Our own office and clinic routine is to have the centrifuged tube placed beside the microscope. We, and all our clinic physicians, prepare a fresh slide, take a few minutes to examine it, either before or immediately after the physical examination of the patient. The most valuable findings are urinary casts which label all other morphologic inclusions as coming from the kidney itself and, therefore, present a slate on which we can read the events which are transpiring in the nephron. A simple descriptive classification of casts has been published previously from our laboratory and is reproduced in Table 3.

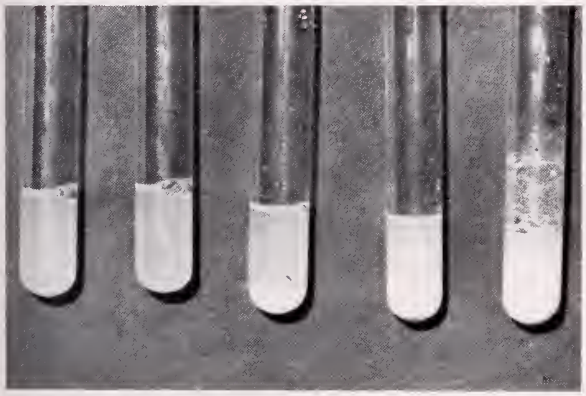

Figure 3. Commonly used method of sulfa salicylic acid precipitation with the grading of the tubes quantitatively from a trace to 4+.

Table 1

KNOWN CAUSES OF PROTEINURIA

1. *Pseudoproteinuria:* Caused by concentrated iodides, excess urates, or spurious additions to the urine.
2. *Urologic:* Protein added to urine below the kidney.
3. *Psychosomatic:* Also called emotional, stress, or autonomic proteinuria.
4. *Febrile:* Due to vasodilatation and/or products of infection.
5. *Transient:* The most common type. Also called benign, intermittent, muscular, exercise, march, physiological, exertional and idiopathic. The common denominator appears to be in the renal circulation.
6. *Postural:* Also called orthostatic, lordotic and constitutional.
7. *Prerenal:* Due to alterations in the plasma proteins.
8. *Renal:* Except for infectious exudates, these are most often on the basis of increased glomerular permeability.

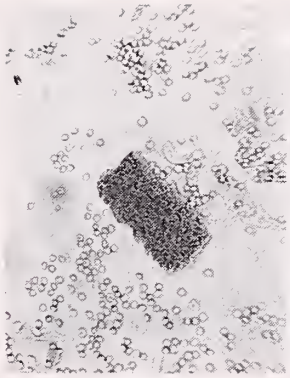

Figure 5

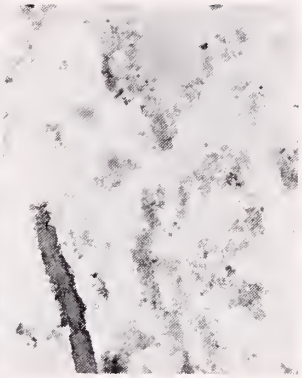

Figure 6

Figure 5. Short hyaline cast with red cells in an 11-year-old girl with acute glomerulonephritis.
Figure 6. Myoglobin casts in a patient with burns.

Table 3

CLASSIFICATION OF CASTS

A. Hyaline (transudation) casts, plain or with inclusion of:
   1. Red cells
   2. Hyaline-blood casts
   3. Polymorphonuclear leukocytes
   4. Tubular epithelial cells
   5. Bacteria
   6. Crystals
   7. Granular material
   8. Fatty material
   9. Bile stained granules

B. Epithelial cell (desquamation) casts
   1. Fresh
   2. Coarsely granular
   3. Finely granular
   4. Waxy
   5. Fatty
   6. Tumor cells
   7. BROAD or renal failure

C. Mucus casts

D. Casts of unusual composition
   1. Bence-Jones protein
   2. "Amyloid"
   3. Myoglobin
   4. Hemoglobin
   5. Dextran
   6. Globin
   7. Other

E. Pseudocasts
   1. Agglutinated red cells
   2. Agglutinated white cells
   3. Packed urates
   4. Cells clinging to mucus threads
   5. Bacteria clinging to mucus threads
   6. Degenerated spermatozoa
   7. "Fibrin" threads

Figure 5 shows a short hyaline cast with red cells in an 11-year-old girl with acute glomerulonephritis. Figure 6 shows myoglobin casts in a patient with burns. Figure 7 shows Sternheimer Malbin stained leukocytes in a patient with pyelonephritis. Figure 8 shows fatty epithelial cells in a patient with nephrotic syndrome. Figure 9 shows renal epithelial cells within a cast.

Urinary sediment findings also are important for the company they keep. In acute glomerulo-

Table 2

TEST NAME	TEST FOR	FALSE POSITIVES	FALSE NEGATIVES	SENSITIVITY	PHYSICIAN'S COST PER TEST
CLINITEST	Urine sugar	Any reducing substance in sufficient quantity	None known. Excessive amounts of protein present may delay or obscure reaction	Minimum .25% Maximum 2.00% and over Color scale degrees: 0.25%, 0.5%, 0.75%, 1.0%, 2.0% and over	1.8¢ in 36's 1¢ in 100's .9¢ in 250's
ACETEST	Acetoacetic acid Acetone in blood and urine	None known	None known	Minimum 10 mg./100 ml. of body fluid Color scale degrees: Small, moderate, large	1.6¢ in 100's 1.4¢ in 250's
BUMINTEST	Proteinuria	Metabolites of: Penicillin (massive doses) Tolbutamide X-Ray media Sulfasoxazole PAS Urine preservatives (some)	Initial turbidity may confuse reading Highly buffered alkaline urine	Minimum 10 mg./100 ml.— No color scale	.6¢ in 32's .5¢ in 100's .4¢ in 500's
ALBUSTIX	Proteinuria	Highly buffered alkaline urine	None known	Less than 20 mg./100 ml. Color scale degrees: 0, 30 mg., 100 mg., 300 mg., over 1000 mg./100 ml.	2¢ in 120's
KETOSTIX	Acetoacetic acid in blood and urine	None known	None known	Minimum 10 mg./100 ml. of body fluid Color scale degrees: Small, moderate, large	1.66¢ in 90's
CLINISTIX	Urine glucose	None known	Large amounts of ascorbic acid may impede color development	100 mg./100 ml. (0.1%) Color scale degrees: Light, medium, dark	1.33¢ in 60's
DEXTROTEST	Blood sugar	Any reducing substance in sufficient quantity	None known	Minimum 100 mg./100 ml. Color scale degrees: 100, 150, 200 mg./100 ml.	Kit .21¢ Refills .13¢
COMBISTIX	pH	None known	None known	Minimum pH 5 Color scale degrees: pH 5, 6, 7, 8 & 9	3.8¢ in 125's
	Protein	Highly buffered alkaline urine	None known	Less than 20 mg./100 ml. Color scale degrees: 0, trace, 30 mg., 100 mg., 300 mg. over 1000 mg./100 ml.	
	Glucose	None known	Large amounts of ascorbic acid may impede color development	100 mg./100 ml. (0.1%) Color scale degrees: negative, light, medium, dark	
URISTIX	Urine glucose	None known	Large amounts of ascorbic acid may impede color development	100 mg./100 ml. (0.1%) Color scale degrees: Negative, light, medium, dark	2.8¢ in 125's
	Proteinuria	Highly buffered alkaline urine	None known	Less than 20 mg./100 ml. Color scale degrees: 0, 30 mg., 100 mg., 300 mg., over 1000 mg./100 ml.	
HEMATEST	Occult blood in feces	Plant residues & bacteria containing peroxidase like substances	None known	1 part of blood in 20,000 to 30,000 No color scale Photographs of typical positives included	4¢ in 60's 3.2¢ in 500's
OCCULTEST	Occult blood in urine	Bacteria containing peroxidase-like substances found in old spoiled specimens	None known	1 part of blood in 100,000 No color scale Photographs of typical positives included	2.4¢ in 250's
ICTOTEST	Urine or serum bilirubin	None known	None known	Urine—between .1 & .05 mg./100 ml. Serum—above 1 mg./100 ml. No color scale Photographs of typical positives included	5.3¢ in 90's
PHENISTIX	Phenylketonuria PAS	None known (Red instead of gray-green colors will develop when salicylates, phenothiozines, etc. are present in urine)	None known	8 mg./100 ml. in 75-80% of random urines 15 mg./100 ml. in 99.5% of random urines Color scale degrees: 0, 15 mg., 40 mg. and 100 mg./100 ml.	8¢ in 50's
ALBUTEST	Proteinuria	None known	None known	Minimum positive 5-15 mg./100 ml. Color scale degrees: Trace (5-15 mg. %) Small amount (20-100 mg. %) Large amount 100-500 mg. %)	2.2¢ in 100's 1.6¢ in 500's

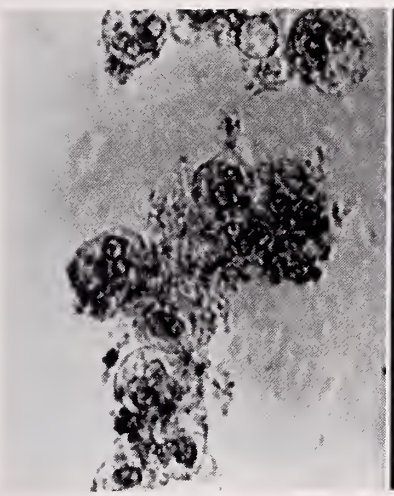

Figure 7

Figure 8

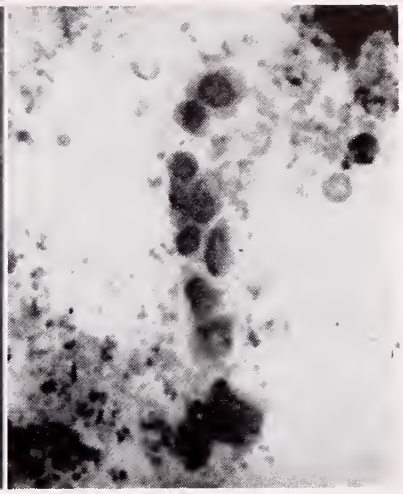

Figure 9

Figure 7. (Sternheimer Malbin stain) leukocytes in a patient with pyelonephritis. Figure 8. Fatty epithelial cells in a patient with nephrotic syndrome. Figure 9. Renal epithelial cells within a cast.

nephritis we look for red cells, red cell casts and a deposit of benzadine stain. In the nephrotic syndrome we look for massive albuminuria, hyaline casts, cellular casts with vacuoles, oval fat bodies, doubly refractile fat bodies, and in chronic glomerulonephritis, less albuminuria with broad renal failure casts. When all three of these stages are tossed into a single urinary specimen, it is highly suspicious of collagen disease of the kidney. Telescoped urinary sediment often is seen in lupus, nephritis and periarteritis involving the kidney.

Summary

We have reiterated the value of the routine urinalysis which is a laboratory test of the highest practical yield in office and hospital. To be of value to the physician, it should be done on properly collected urine specimens. Much can be learned from simple observation and relatively simple chemical tests on a concentrated urine sample. In fact, new techniques have made most of these tests available at the bedside. The microscopic examination which may contain a clue to the diagnosis of a large number of diseases should never be relegated to the casually trained technician nor to the commercial laboratory. It should be done by the physician himself who has taken the history and made the physical examination of the patient and who therefore is in the best position to seek and identify the important pathologic elements in the urinary sediment.

Reference

1. Beale, L. S.: Kidney Diseases, Urinary Deposits and Calculous Disorders; Their Nature and Treatment, Philadelphia, Lindsay & Blackiston, 1870.

Health and Personality

HEALTH is a state of balanced functioning, an inner drive of adaptation to the stresses of life. As long as an individual is emotionally and physically able to adjust to stress he can maintain a state of balance and will remain whole—that is, healthy. If a situation proves to be stronger than the individual, then something in the personality must break. This can be a physical or mental break. It will depend on the individual's ability to find his way out of the dilemma, by either breaking the situation, or by a process of readjustment—which means not simple compromise but a positive acceptance of a life situation or situations—without inner rebellion, resentment, or unconscious hostility and thereby allow his system to regain a state of balanced functioning.—A. A. Hutschnecker, M. D., in Industrial Medicine and Surgery.

unsurpassed "general-purpose" steroid outstanding for "special-purpose" therapy
Aristocort®

in allergic respiratory disorders

Aristocort®

Triamcinolone LEDERLE

UNSURPASSED "GENERAL-PURPOSE" STEROID
OUTSTANDING FOR "SPECIAL-PURPOSE" THERAPY

ARISTOCORT Triamcinolone has long since proved its *unsurpassed efficacy and relative safety* in treating allergic respiratory disorders, including bronchial asthma. Clinical evidence has now shown that ARISTOCORT is also highly valuable for "special-problem" patients—asthmatic and others—who, because of certain complications, were hitherto considered poor candidates for corticosteroids.

for example:

PATIENTS WITH IMPENDING CARDIAC DECOMPENSATION

In contrast to most of its congeners, ARISTOCORT is not contraindicated when edema is present or when cardiac decompensation impends.[1]

PATIENTS WITH EMOTIONAL AND NERVOUS DISORDERS

Triamcinolone did not produce psychic disturbances or insomnia.[2]

PATIENTS WHOSE APPETITES SHOULD NOT BE STIMULATED

Among patients treated with ARISTOCORT, there was less appetite stimulation, especially in those who had previously gained weight on long-term therapy with other steroids.[3]

PATIENTS WITH HYPERTENSION

There was no blood pressure increase in any patient treated for bronchial asthma, and in some, blood pressure fell. Of these, three had been hypertensive.[4]

References:

1. McGavack, T. H.; Kao, K. Y. T.; Leake, D. A.; Bauer, H. G., and Berger, H. E.: *Am. J. M. Sc.* 236:720 (Dec.) 1958.
2. McGavack, T. H.: *Nebraska M. J.* 44:377 (Aug.) 1959.
3. Friedlaender, S., and Friedlaender, A. S.: *Antibiotic Med. & Clin. Ther.* 5:315 (May) 1958.
4. Sherwood, H., and Cooke, R. A.: *J. Allergy* 28:97 (March) 1957.

Precautions: Collateral hormonal effects generally associated with corticosteroids may be induced. These include Cushingoid manifestations and muscle weakness. However, sodium and potassium retention, edema, weight gain, psychic aberration and hypertension are exceedingly rare. In the treatment of allergic respiratory disorders, dosage should be individualized and kept at the lowest level needed to control symptoms. Dosage should not exceed 36 mg. daily without potassium supplementation. Drug should not be withdrawn abruptly. Contraindicated in herpes simplex and chicken pox.

Supplied: Scored tablets—1 mg. (yellow); 2 mg. (pink); 4 mg. (white); 16 mg. (white). Also available—syrup, parenteral and various topical forms.

Lederle

Request complete information on indications, dosage, precautions and contraindications from your Lederle representative or write to Medical Advisory Department.

LEDERLE LABORATORIES, A Division of AMERICAN CYANAMID COMPANY, Pearl River, New York

Special Article

A Definition of Units Used in Measuring Body Electrolyte Composition

R. F. Krause, M. D.

An understanding of body fluids is essential to every branch of medicine. A concept of the basic principles involved in regulating these body fluids is a sine qua non for all diagnoses and therapeutic measures involving water and electrolyte problems.

Today much is written and spoken about body fluids but often the language and terminology are too technical for many audiences or readers to understand. As a result, many mental blocks have developed toward comprehending this important problem. A large part of this difficulty stems from a lack of understanding of a few basic definitions. It is the purpose of this paper to attempt to define briefly but clearly some of these fundamental terms.

Ionization

The concept of *ionization* is the first term to be discussed. If an electrical current is passed through a solution of sodium chloride, sodium will collect at the negative pole (cathode) and chloride will collect at the positive pole (anode). This occurs because sodium chloride in water dissociates into charged particles *(ions)* and since unlike charges attract and like charges repel each other, the electronegative ion (chloride) migrates to the positive pole and is called an *anion*, while the electropositive ion (sodium) migrates to the negative pole and is called a *cation*. An electrolyte may then be defined as a substance which when dissolved in water will conduct an electrical current. An *ion* is a positively or negatively charged particle resulting from this dissociation (ionization). A positively charged particle is called a *cation* (e.g., H^+, Na^+, K^+, Ca^{++}, Mg^{++}) and a negatively charged ion is called an *anion* (e.g., Cl^-, HCO_3^-, $HPO_4^=$).

Equivalent Weights and Milliequivalents

The old practice of expressing electrolyte composition of body fluids in terms of milligrams per one hundred milliliters (mg. per 100 ml.) is not adequate for the appreciation of the relation between anions and cations. This is because substances do not react with each other milligram for milligram but do react in proportion to their equivalent weights. An *equivalent weight* is that weight of an ion or substance which can replace or combine with one gram of hydrogen. For example, one equivalent weight of sodium (atomic weight 23) will react with one equivalent weight of chloride (atomic weight 35.5). That is, 23 grams of sodium (one equivalent) will react with 35.5 grams of chloride (one equivalent weight) to produce 58.5 grams of sodium chloride. This reaction is based on the principle that even though the molecular or atomic weight of substances are different, one equivalent weight of any substance has the same number of unit particles that participate in a chemical reaction. In body fluids the electrolyte concentrations are low and it is more convenient to use milliequivalents which is 1/1000 of an equivalent weight. One milliequivalent of sodium (23 mg.) will react with one milliequivalent of chloride (35.5 mg.). The milliequivalent weight of a substance is determined by dividing the atomic weight of the substance in milligrams by its valence (in the reaction). Since it is generally desirous to express electrolytes in terms of concentration, it is customary to refer to the number of milliequivalents per liter (1000 ml) of body fluid.

The unit "milligram per cent" can be converted to milliequivalents per liter by multiplying by 10 in order to express the original concentration in milligrams per liter, and dividing this value by the atomic weight of the substance and multiplying by its valence. Another way to state this conversion is to divide the number of milli-

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grams per liter by the equivalent weight of the substance $\left(\text{equivalent weight} = \frac{\text{atomic weight.}}{\text{valence}}\right.$

Therefore

$$\text{milliequivalents/L} = \frac{\text{Mg/L}}{\frac{\text{atomic weight}}{\text{valence}}}$$

$$\text{or meq/L} = \frac{\text{Mg/L}}{\text{atomic weight}} \times \text{valence}).$$

For example, 326 mg. per cent of sodium in serum may be expressed as 3260 mg. per liter. This value divided by the atomic weight of sodium (23) and multiplied by one (1) its valence equals 142 milliequivalents per liter (meq/L).

It is common practice to express the concentration of Na^+, K^+, Cl^-, and HCO_3^- in serum in terms of milliequivalents per liter. There are justifiable reasons for expressing calcium, phosphorous and protein in gravimetric terms (grams or milligrams per cent).

The biocarbonate concentration of serum is still often determined as total CO_2 content in terms of volumes per cent. The conversion of this value to milliequivalents per liter is based upon the following principle. Under standard conditions of pressure and temperature the weight in grams of 22.4 liters of any gas is its molecular weight and is expressed as one *mol* of a gas. A millimol is 1/1000 of a mol. The terms millimol and milliequivalent for CO_2 may be used interchangeably because at a normal pH the total CO_2 content reflects the concentration of bicarbonate in the blood. Since one millimol of carbon dioxide will yield one milliequivalent of bicarbonate, we can express CO_2 content in terms of milliequivalents per liter. For example, a total CO_2 serum content of 78 ml per 100 ml may be converted to 35 milliequivalents of bicarbonate by multiplying 78 by 10 and dividing by 22.4.

Milliosmols

For certain purposes electrolyte concentrations are also expressed in terms of *osmolar concentrations.* In order to explain this term properly, *osmotic pressure* must be defined. If into a vessel containing distilled water is placed a second vessel containing another solution with many particles, and the two solutions are separated by semipermeable membrane, that is, a membrane permeable to water but impermeable to the particles in solution, water will flow into the container with the particles. The force directing this flow of water is termed *osmotic pressure* and is directly proportional to the number of particles in solution. The unit of pressure is called the *osmol.* If 35.5 gm. of chloride are dissolved in one liter of water and placed in the second vessel, cited above, it will produce an osmotic pressure of one osmol. Hence an equivalent weight of an ion or particle with a valence of one, dissolved in one liter of water will exert a pressure of one osmol. *Ions* such as Ca^{++} and Mg^{++}, which are divalent, require two equivalents to produce an osmotic pressure of one osmol. One milliosmol is equal to 1/1000 of an osmol. In the case of unionized substances, e.g., glucose or urea, one millimol (molecular weight in milligrams dissolved in one liter of water) is equal to one milliosmol. Since osmotic pressure depends in part on the number of particles in solution and since electrolytes are highly ionized, millimols and milliosmols in this situation are not identical. For example, sodium chloride will ionize into sodium and chloride and hence one millimol of sodium chloride equals two (2) milliosmols. A gram of sodium chloride obviously produces a greater osmotic pressure than a gram of protein because of the greater number of particles. Therefore the osmotic pressure exerted by plasma is due largely to its electrolyte content.

In summary, it is hoped that the above definitions will assist and stimulate the reader to acquire a basic understanding of water and electrolyte problems as they relate to the practice of medicine.

. . . no man is completely worthless—he can always serve as a horrible example.

ANON.

Special Article

History of the Student Health Service Of West Virginia University

Edward J. Van Liere, M. D., Ph. D., and Gideon S. Dodds, Ph. D.

West Virginia University has long felt responsibility for a certain degree of supervision of the health of its students, as well as for maintaining healthful living conditions on the campus. Health care for students is especially necessary for underclassmen, because the great majority are young people. Many freshmen are for the first time removed from parental guidance; furthermore, they are away from their family physician. Since the University has a School of Medicine, it is logical that the care of the health of the students falls within its field of activity.

The Beginning of the Student Health Service

The earliest recorded official action leading to the establishment of a health service for students of the University is an order by the Board of Regents at a meeting on June 22-25, 1915, when the following was adopted:

> "Ordered, that beginning with September, 1915, all men students in the University shall pay a medical fee of $2.00 each per semester, in return for which they shall receive free dispensary service from the Department of Pharmacy of the University, and free medical attention, including minor surgery (specialties excepted) from the faculty of the School of Medicine; that the Dean of the School of Medicine shall so arrange class work that one of the faculty can be available at all times to give attention to students needing it; that for night calls members of the faculty be paid at rates prevailing among physicians in Morgantown, and that any balance in this fund may be used in payment for hospital service in case of students not able to pay for it themselves and for equipment for the School of Medicine, it being understood that Summer School Students and those coming for only one class to be exempted from the provisions of this order if so desired."

It is of interest that the order includes both the School of Medicine and the then Department of Pharmacy in the service. This advantageous arrangement has been maintained throughout the years, and has functioned satisfactorily. The 1915-1916 University catalogue carried the first notice of student health care. Such notices have been carried in subsequent catalogues.

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The records of the Board of Regents do not state why the service was restricted to male students. The year (1915) in which the health service plan for men became operative the student body numbered 892, of whom 645 were men and 247 women. At that time the population of Morgantown was 9,150.

One wonders why nearly a half century elapsed after the founding of the University before any provision was made for the health care of the students. It is of interest that the earliest health service was developed in Amherst College in 1859. It was under the direction of a physician who gave medical care to the students and made periodic physical examinations. The program also included physical education as a health measure for students.

Several other institutions soon established health services; nearly all of these involved coordination of physical training with medical care. As intercollegiate athletics became increasingly popular, student health services gradually became divorced from departments of physical education and athletics. At West Virginia University the health service from its beginning was supervised by the staff of the Medical School and had no connection with physical education or intercollegiate athletics until 1929.

By 1920 the student health service program had become sufficiently widespread that representatives of 37 institutions having such services met and organized the American Student Health Association. This organization continues its ac-

tivities as the American College Health Association, of which West Virginia University is a member.

Care of Students Falls on Teachers Of School of Medicine

It should be emphasized that the work of taking care of the health of the student body actually fell upon the men teaching in the School of Medicine. The faculty of the school in 1915 included only three full-time men who had M. D. degrees: John N. Simpson, dean; Samuel J. Morris, assistant professor of anatomy and histology; and Aaron Arkin, professor of pathology and bacteriology.

Two men were listed on the faculty of the Department of Pharmacy (then a part of the School of Medicine): Charles H. Rogers, assistant professor of pharmacy, and Wilbur K. Jackman, instructor in pharmacy.

The small size of the University and the primitive nature of the situation at that time, are indicated by the instructions to students. Those unable to leave their rooms for medical service were to call the President's office during the day and the home of the Dean of the Medical School at night. After the Medical Building was completed in 1916, students seeking medical care reported to the office of the Dean of the Medical School. This situation prevailed until 1923 when the Health Service was moved to a separate building.

World War I (April, 1917 to November, 1918)

The early years of the Health Service embraced the World War I era. During the school year 1917-1918, there was no additional load on the Health Service. However, during the first semester of 1918-1919, the work was greatly increased by the presence on the campus of a good-sized group of men in the Student Army Training Corps (SATC). These men were quartered in barracks; the buildings used were the central part of Women's Hall, and a primitive frame building which occupied the ground where the Field House now stands.

Three members of the medical faculty, Doctors Simpson, Morris and Arkin, were responsible for the health of both the regularly enrolled students and the SATC group. These physicians were commissioned in the U. S. Army, and at times wore uniforms. Their work was enormously increased by the widespread and severe outbreak of the so-called "Spanish Influenza," and they deserve much credit for their untiring service during this strenuous time.

The local situation became extremely serious. Not only were there many sick students, but many of the citizens of Morgantown were afflicted. There was insufficient personnel to provide medical care for the populace, partly because the war had caused a depletion of the number of physicians and nurses.

Early in October (1918) the Commandant of the University dismissed the trainees and sent them home, and President Frank B. Trotter closed the University for a period of four weeks. This relieved the situation to a considerable extent. The ending of the War in November (1918), and the termination of the SATC reduced the load of the Health Service to the usual level.

Expansion of Health Service to Include Women

Extension of the Health Service to include women students was provided in an order of the Board of Regents at a meeting on January 24-26, 1921, as follows:

> Ordered that the President of the University be, and he is hereby authorized to collect the medical fees from women students as well as men, and that this be applied toward providing a teacher in physical training for women, effective second semester, 1921.

In 1921-1922 the student population had grown to 1,623, of whom 550 were women. For medical service the students continued to report to the Medical Building, where the physicians of the faculty, six in number (J. N. Simpson, A. Arkin, M. L. Bonar, C. R. Kessel, S. J. Morris, and E. J. Van Liere), saw the patients. To secure the prescribed medicines students went to the basement of Woodburn Hall, where the drugs were dispensed by one of the three members of the Department of Pharmacy.

College of Pharmacy in Relation To the Health Service

From the beginning of the Health Service, in 1915, the medicines prescribed by the physicians were dispensed by the staff of the Department of Pharmacy, which until 1936 was a part of the School of Medicine. For this reason certain members of the pharmacy group have always been included on the staff of the Health Service — a most beneficial relationship.

As a sidelight, it will be recalled by some readers that for a number of years University rules made a sharp distinction between "excused" and "unexcused" absences from class. The physicians of the Health Service were required to write excuses for students claiming illness (probably sometimes alleged). This added considerably to the load of the physicians, and perhaps also to those who dispensed the medicines. In recognition of this situation at one time a notice was posted by a member of the pharmacy staff which

read, "If you have your excuse, and don't need the medicine, please do not bother us."

Full-time Physician Appointed, And A Health Service Building Procured

The school year 1923-1924 marked two important steps in the development of the health service program in the University.

The first was that a virtually full-time University physician was appointed, whose primary responsibility was the conduct of the health program for students. He was assigned only minor teaching duties. C. Royall Kessel, M. D., a graduate of Jefferson Medical College, who, for two years had held a teaching position in the School of Medicine, was chosen to fill this position. The assignment of a full-time physician to this important task was fully justified, as the enrollment for the entire calendar year had reached 2,227 students (1,564 men and 663 women). The health needs of such a number had grown beyond the capacity of the loosely organized program of former years.

The second significant development was the acquisition of a building for the exclusive use of the Health Service. It was a small two-storied house on the campus immediately behind the residence of the University President. The first floor contained waiting rooms and offices for a physician and a nurse. On the second floor was a large room used as a three-bed ward (later expanded to five beds), and a one-bed room set aside for contagious diseases.

Under the new plan, the physicians of the Medical School continued to serve, but on a much reduced schedule. The Department of Pharmacy still provided medicines. An important addition to the facilities of the Health Service was an x-ray machine which was housed in the Medical Building, but readily available to the Health Service.

Health Service Transferred to Division Of Physical Education

In the summer of 1929 the Health Service was removed from the supervision of the School of Medicine and placed in the recently established Division of Physical Education, under the direction of Carl P. Schott, Ph.D.

In the autumn of 1929 an important program was inaugurated, a physical examination being given to all entering students. This was, indeed, a worthwhile development. In some instances early disease conditions may be discovered, such as an occasional early case of tuberculosis, or less grave findings as defects in vision or other conditions amenable to correction or treatment.

Another important feature is the educational value to the student of a thorough physical examination. This experience may impress him to the extent that throughout his life he may visit his family physician periodically for a complete physical check-up.

The continued growth of the student body demanded an expanding staff. By this time (1929) the enrollment had grown to 2,097 in the regular school year, and a summer enrollment of 1,383. Obviously this made a steadily increasing load for the Health Service. In response to this need a part-time physician was employed and two nurses were added to the staff.

Health Service Returned to Supervision Of School of Medicine

The Board of Governors of the University on August 29, 1935, ordered that the Health Service be returned to the supervision of the School of Medicine, effective September 1, 1935.

At that time the student population during the regular term was approximately 2,400, and there were about 1,200 in the summer session.

Health Service Building—1942

One of the major events in the history of the Health Service was the construction of a substantial building, which was occupied on May 8, 1942. The sum of $135,000 had been requested for this structure, but only $100,000 was appropriated.

The building is of concrete and brick, T-shaped design, 88 by 68 feet. On the first floor is the receiving area, offices for three physicians, and rooms for treatment. There are also two small rooms operated as a pharmacy.

On the second floor is a diagnostic laboratory with offices for its personnel, and a room for electrocardiography and basal metabolism determination. The x-ray equipment is housed adjacent to the laboratory. There are also three offices for physicians on this floor.

The third floor is planned for bed care. On the main corridor are rooms accommodating 16 beds. In the rear are two isolation wards with a total of seven beds with their own bathroom and diet kitchen. On the main corridor, a three-room suite, originally intended for the nursing staff, has been redesigned to serve as a women's lounge and a waiting room for visitors. One room is now in active use for electroencephalography.

World War II

The facilities of the infirmary were used to great advantage during World War II for bed care of men stationed at the University by the U. S. Armed Forces for collegiate training. A

total of 3,873 such men were on the campus during the three-year period.

The first contingent of trainees arrived from the southern part of the United States in March 1943. Unfortunately the weather in Morgantown was extremely inclement; during the first three months 139 of these men were patients in the infirmary, and 863 treatments were administered at sick call. The facilities of both the infirmary and the outpatient department were used by the trainees throughout the war. The Health Service, although somewhat undermanned, unquestionably provided great assistance to the ASTP units. At that time the enrollment of the University was about 2,182 students.

Immediately following the war years there was a sudden expansion of the student body, caused in part by an influx of veterans, many of whom were married. This created a new set of problems for the personnel of the Health Service. Some of the married couples lived in a trailer-park, and others at a considerable distance from the center of the campus. Sick calls at night to these various places, especially the trailer-camps, was indeed a vexatious experience.

Infirmary and Hospital Care

In 1923 when the Health Service was first housed in a separate building there was, as previously mentioned, space for three to five beds, plus an isolation room for contagious diseases. During the first year in this building 122 patients were hospitalized (and 14 others referred to local hospitals). For about 12 years this modest infirmary continued to accommodate a relatively large number of patients; for example, in 1929-30, 160 students were hospitalized (and 31 cared for in local hospitals). Due to increasing enrollment, however, the staff was gradually increased and in 1935 an x-ray machine was placed in the building. As a result no space was left for beds.

An interesting side-light occurred in March, 1935. Four boys afflicted with scarlet fever were placed in the President's house, which at that time stood untenanted.

After some temporary arrangements with local hospitals (for a period of about two years), an agreement was made with the Morgantown Hospital Service whereby students, on payment of a fee of 25 cents per semester (later increased to 50 cents) would receive hospitalization at either of the local hospitals.

In the four years beginning with 1935-1936 the number of students hospitalized under this arrangement was 52, 45, 51, and 75 respectively. These numbers are well below the yearly admissions to the old infirmary. It appears that the students were more willing to be hospitalized in the University infirmary than in the local hospitals. Another factor in the smaller number of hospitalizations was the development of a system of frequent visits by the physicians (and nurses) to those who were rather seriously ill in the dormitories. Thus the latter were used as a supplement to the hospital service — obviously not a good arrangement. From 1935 to 1950 the students continued to use the local hospitals, but not in great numbers; the largest number of admissions for any one year was 104 in 1947-1948.

Opening of the Infirmary

On February 1, 1950 the infirmary of the Health Service was made available to all students (it had been closed since 1946). The delay in opening was not due to a lack of desire to use it earlier, but rather because of insufficient funds. It was mandatory, for instance, that four additional trained nurses, as well as other personnel, be employed immediately. Use of the infirmary at once became considerable. During the following five months 199 students were accommodated for periods ranging from 1 to 14 days. Food was provided by the University cafeteria adjacent to the Health Service building, which proved to be an excellent arrangement.

The opening of the infirmary was of great advantage to both students and University physicians. The student obviously could receive more adequate medical care, and the work load of the physicians was markedly reduced since there were fewer outside calls to make.

At times all the beds have been occupied, especially during epidemics. In the first eight years of its use a yearly average of 537 students have been hospitalized, the figures ranging from 392 to 748. The students are charged a modest fee for infirmary use, a part of which cost is often met by hospital insurance or some other provision.

The infirmary has occasionally not been able to accommodate all students needing bed care. During the Asian influenza epidemic in October 1957, additional space was provided by setting up beds in Elizabeth Moore Hall (women's recreational hall) and in the lounges of the Men's Dormitory. A total of 150 beds were thus made available.

Students are hospitalized in local hospitals for major surgery, and occasionally for special services (such as continuous oxygen administration) not available at the infirmary.

The Diagnostic Laboratory

Important among the activities of the Health Service is the work of the diagnostic laboratory. Prior to occupation of the present building, where all phases of the work can be performed in adjacent laboratories, the work was done in various places: in the departments of pathology and bacteriology, and the x-ray work in still a different area.

A great deal of laboratory work is performed, for example, in 1958-1959 the following tests were made: 5,163 hematological, 747 serological, and 1,418 bacteriological examinations; 2,334 urine analyses; 258 blood chemistry; and 41 basal metabolism determinations. The x-ray laboratory took 1,246 films, and 65 electrocardiograms were made. In addition, a number of miscellaneous tests were performed.

Cost to Students

In the earliest notice regarding health service fees (University catalog for 1915) it was seen that the students (male) paid a medical fee of $2.00 per semester. The prescribed medicines were issued without cost to the students, but a modest charge was made for them later (1932).

As pointed out elsewhere, in 1921 women were included in health service care and at that time the fee was increased to $2.50 per semester. Presently, students are charged $3.00. Moderate additional charges are made for room calls, minor surgical operations, treatment of fractures, x-rays, and laboratory tests. There is also a limited charge for drugs dispensed by the Health Service Pharmacy.

Ambulatory Patients and Infirmary Admissions

As would be expected, the majority of students needing medical care are ambulatory cases. Actually, the Health Service has a very active out-patient service. No figures are available as to the number of outpatient visits to the Health Service until a full-time physician was employed in 1923-1924.

Table I

Year	University Enrollment	Dispensary Visits	Infirmary Admissions	Patient Days in Infirmary
1923-24	2,227	3,924	*	*
1929-30	3,032	12,122	*	*
1935-36	3,637	15,131	*	*
1941-42	3,865	22,316	*	*
1945-46	4,483	19,127	*	*
(Includes 449 Army)				
1950-51	7,310	23,127	499	1,120
1955-56	7,722	18,916	422	754
1958-59	8,200	20,538	457	949
1959-60	8,300	24,630	583	1,235

*Infirmary opened February 1, 1950.

Table I shows the growth of the out-patient clinic during the past 37 years. It shows also the number of patients hospitalized, and the number of hospital days for certain years between 1951 and 1960.

Table II shows the nature and scope of the activities of the Health Service for the year, 1958-59.

Table II

CLASSIFIED LIST OF TREATMENTS

1958-59

	Number for the year
Minor dressings	806
Traumatic Conditions	744
Upper Respiratory Infections	4,226
Pulmonary Conditions	2
Tonsils and Pharynx	659
Mouth and Teeth	390
Eye	319
Ear	433
Heart	7
Gastrointestinal	536
Genito-urinary	40
Menstrual disorders	99
Nervous System	182
Skin	635
Orthopedic	684
Vaccines	3,807
Physiotherapy	1,294
Basal Metabolism	41
Electrocardiograms	65
Electroencephalograms	54
Physical Examinations	1,924
Miscellaneous	3,297
Influenza	60
Measles	4
Mumps	1
Total	20,309

Personnel of Health Service

During the last decade the staff has included from five to eight physicians (some on a part-time basis), five to six nurses, from two to three technicians, three clerical personnel, and one pharmacist. Some of the physicians devote a considerable amount of time to teaching. Ideally, there should be one full-time physician for each thousand students. Since there are over 6,000 students enrolled in the University during the regular term there should be six full-time physicians.

Besides routine medical care of students, special physical examinations are given to those who engage in competitive athletics. University food handlers are also examined, as are employees of the department of buildings and grounds.

An x-ray consultant service is provided. Once or twice a week a competent radiologist visits the Health Service and confers with the staff. An important service was inaugurated in January 1959; a psychiatrist was made available one day a week for students in need of such service. In September (1960) it was arranged for a psychiatrist to be in residence two days a week.

The following men have served as Directors of the University Health Service:

C. Royall Kessel, M. D.	1923-29
Wilbert H. McGaw, M. D.	1929-32
Frederick R. Whittlesey, M. D.	1932-41
Roy Roosevelt Summers, M. D.	1941-43
Jerome E. Andes, Ph.D., M. D.	1943-44
John J. Lawless, Ph.D., M. D.	1944-

The following have served as Assistant Directors:

Frederick R. Whittlesey, M. D.	1930-32
Roy Roosevelt Summers, M. D.	1932-41
Clark K. Sleeth, M. D.	1948-58

These men have done an excellent job, and the University and the citizens of the state owe them a debt of gratitude for their devotion to the care of the health of the student body. The position as director of the health service carries with it heavy responsibilities and, at times, as would be expected, troublesome situations arise. Calls from anxious parents (and friends) at any time of day or night are common. This is especially true if operative procedures on patients are recommended. During periods of epidemics (such as the most recent influenza episode) the staff of the Health Service works under considerable stress.

A university worthy of the name takes great pride in its public relations. This is quite understandable since it is a tax-supported institution. A physician in the Health Service has always to remember that in addition to treating patients (which admittedly is his most important duty) he is an integral part of the University. His actions and words must obviously be governed accordingly. He is in a position to add perceptibly to the prestige of the University.

General Education Value of the Health Service

As the authors have observed the functioning of the Health Service, it becomes increasingly apparent to them that it has given valuable service to the University community, and to the state as a whole. Undoubtedly, the parents of university students feel a greater security because of its facilities. In this connection the senior author has on numerous occasions been approached by parents, who were interested in having their children enroll in the University. In effect, they stated that unless good medical care could be guaranteed they would be reluctant to have their child matriculate. It is pleasant to relate that assurance could always be given them.

One of the important functions of the Health Service lies in the training and experience it gives the students in the use of modern health facilities. This knowledge should carry over into personal and community health problems after they have left the University. If this obtains, the educational value of the Health Service is immeasurable in the amount of good it does.

Acknowledgment

The authors wish to thank Dr. J. J. Lawless, Director of the Student Health Service, for supplying certain data, and for critically reviewing the manuscript.

Public Awareness of Cancer

PUBLIC awareness of cancer and its dangers has increased over the last ten years so that many patients today are being treated successfully before their lesions become inoperable or fatal. This progress is certainly encouraging, but it is not good enough! Cancer is still responsible for more deaths than any other killer except heart disease. Medical science continues its efforts though, and the public is gaining a better understanding of cancer, but the crashing tragedy of modern medicine is that people who could have been saved are dying.

We know that approximately half of all cancer deaths last year could have been avoided by early detection and treatment, and this, to me, is frightening. It means that somewhere we are failing. In some way we are permitting unnecessary death. It is up to medical research and experimentation to find means of curing or preventing cancer in those who cannot now be saved. The other 50 per cent—those who should not die—are the responsibility of every practicing physician.—E. Vincent Askey, M. D., President, AMA, in The Cancer Bulletin.

The President's Page

Guest Author, Mrs. Clark K. Sleeth, Morgantown, President,
Woman's Auxiliary to the West Virginia
State Medical Association

Promoting an Awareness of the Auxiliary

I am pleased and honored to have the privilege of writing the President's Page in this issue of *The Journal.* I welcome this opportunity to thank the State Medical Association and its executive officers and staff for the cooperation, encouragement and wise counsel which we enjoy in our state. This is also an opportunity for me to present to the physicians of West Virginia a report of the activities of the Woman's Auxiliary.

The Auxiliary program is varied and includes both cultural and educational aspects. We try to keep ourselves informed so that we may channel authentic and accredited information into our local health agencies and lay groups. Several Auxiliary committees work along the same lines as the corresponding committees of the Association such as Legislation, A. M. E. F., Mental Health, Rural Health and Community Service (i.e. public relations).

In legislation, the Auxiliary has shown time and again that we can assist in defeating unfavorable legislation by our letter writing campaign. In the same manner we have helped in support of AMA approved legislation. We have shown our interest in supporting our medical schools by our gifts to A.M.E.F., supplementing those given by our medical societies and physicians. We have aided on county and state levels in securing scholarships and loans for young people going into the various health careers, and we have encouraged young women to enter nurse's training through our future nurse clubs throughout the state.

The Auxiliary has urged its members to work with the Farm Women's Clubs to help furnish them with authentic approved material on subjects of nutrition, health, and good living through the rural health program.

Our Auxiliary members are active community workers, too. They give freely and willingly of their services to their hospitals, Boy and Girl Scouts, PTA's, baby clinics and churches. Voluntary health agencies such as Tuberculosis, Heart, Cancer, Crippled Children, Red Cross, and a myriad of other worthwhile organizations also receive our vigorous support.

Each year, the Woman's Auxiliary prepares and distributes a book of annual reports at the state convention. Included in the book are reports of all state officers and chairmen of the Auxiliary and a report of all activities of each county auxiliary for the year. I would recommend this book to our physicians in West Virginia so that they may read for themselves the achievements and worthwhile activities of the Woman's Auxiliary.

The West Virginia State Medical Association has approximately 1500 members. At present, the Woman's Auxiliary has 1070. Somewhere in West Virginia there are several hundred potential members of the Auxiliary. It is our earnest desire that these women join with us as we stand beside our husbands to give service to the medical profession and to the health of our communities.

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EDITORIALS

'FISH OR CUT BAIT'

Last evening (April 6), another local physician and I had the opportunity of appearing on television in a debate with two representatives of organized labor on the subject, "The Kennedy Approach to Medical Care of the Aged." The experience was stimulating, informative and somewhat disturbing. Our opponents had been well supplied with statistics and propaganda, some based upon fact and some upon bias, selfish interest, false premises and opinions, uttered in part by officials of organized labor, church groups, politicians and professional welfare workers. These people are deadly serious in their determination, whatever might be their underlying basic philosophies, to force another wedge into the door of national compulsory health insurance.

The surface plausibility of their statements is certain to have some positive effect upon those segments of our population who for a quarter century have been exposed to the alleged benefits of a welfare state, and upon those whose economic status forces upon themselves the absolute need for help in achieving greater security in their latter years.

The present situation is deadly serious to the medical profession. We can no longer afford to assume an active or passive critical attitude toward this or similar programs, which, if enacted into law, will surely lead to national compulsory health insurance, and eventually to a complete welfare state. When one reads or hears the stated opinions of these socialistic leaders who have admitted their ultimate aims, every physician must realize his obligation to support a *constructive* approach to the solution of this ever-increasing problem. Perhaps the simplest and best procedure available right now, and already in operation, is through the Blue Cross-Blue Shield, or by commercial carrier, whichever demonstrates they can best do the job at hand.

The present MAA program, under the Kerr-Mills bill is admittedly not ideal nor complete, but it can be improved. Its most patent weakness is the narrow band of disability or sickness coverage, the lack of requirement that beneficiaries, even with limited income, should contribute at least a nominal amount toward the purchase of medical care coverage, and its present lack of adoption by many of our states. I firmly believe that a contributory type of program is essential for the good of both government and citizens.

In 1953, during my presidency of the State Medical Association, I advocated the immediate partial, and eventual complete consolidation of the eight separate Blue Cross-Blue Shield plans in our state. There was immediate opposition by many of the plan managers and officials, and one prominent physician, who had sired and nursed his local plan to maturity, very curtly told me to keep my fingers off his particular baby.

It is now 1961, and conditions have changed very slightly. Two of the Blue Cross Plans in

Huntington and Charleston have consolidated, and a confederation-merger, whatever the term signifies, has been effected between Wheeling and Fairmont. During these years I have gained the impression that refusal to even consider consolidation is based upon the apparent lack of desire on the part of plan management to relinquish local prestige and autonomy to a more economical and efficient single state plan.

I have no desire to pose as one who has cried out in the wilderness, but after a continued objective study of this serious problem, now brought into a state of acute exacerbation, I would humbly suggest that the medical profession of our state act right now in a constructive effort to effect a consolidated means to provide adequate prepaid medical and hospital care, with premium costs and services identical in every community of the state, not only for our senior, but for all citizens. It is very possible that refusal to consolidate will seriously hamper any constructive effort we might make; I will go even further and state the opinion that lack of constructive action, plus the development of compulsory health insurance under federal control will seal the doom of all voluntary prepaid agencies in the nation. We have got to fish or cut bait.

It is my considered opinion that federal and/or state governmental participation should be limited to financial assistance, from general tax sources, to the lower-income group of senior citizens for the purchase of prepaid voluntary contracts, identical in every community, with the requirement that each senior citizen, not on the public assistance rolls, shall contribute, on a scale commensurate with his income, toward the premium costs thereof.

The details of such a plan are many and complex, but if we are determined and sincere, an effective solution can be reached.—*Guest Editorial by James S. Klumpp, M. D., Chairman, Medical Economics Committee, West Virginia State Medical Association.*

HEALTH SERVICE OF W. V. U.

An article concerning the Health Service at West Virginia University is printed elsewhere in this issue of *The Journal.* The service was first put into effect in 1915, forty-seven years after the University was founded. The question may be raised why nearly half a century elapsed before provision was made for the care of the health of the students.

One reason may be that the student body was relatively small, and health problems were not so evident as they would have been in a larger population. It is possible, too, that the American citizens had not as yet become health conscious. Another reason may be that the trend toward offering health care in collegiate institutions had not become well established. It is true that as early as 1859 a health service plan was inaugurated at Amherst College, but it was not until 1920 that collegiate institutions offering health service programs organized the American Health Association, now known as the College Health Association.

The Health Service of West Virginia University had a humble beginning. In 1915 when it was started the entire student body numbered 892. As the University grew, the Health Service expanded to meet the growing needs of the student body.

During the regular academic year 1959-60 there were approximately 6,300 students enrolled. It is of interest that there were 24,630 outpatient visits, and 583 students were hospitalized in the infirmary for a total of 1,235 hospital days.

Although the principal task of the staff of the University Health Service is to take care of the ill student, it also has the function of educating him in health matters. The student is encouraged to seek medical care when needed, and to take advantage of the current advances of medical science. This habit, if once established in the young individual, should carry over after he has finished college. If the University Health Service can inculcate this philosophy, it has, indeed, performed an important function, and the amount of good it has done is incalculable.

MILLIEQUIVALENTS AND MILLIOSMOLS

Elsewhere in this issue of *The Journal* may be found a paper dealing with definitions of units used in measuring body electrolyte composition. Many physicians either have never learned or have forgotten the significance of equivalent weights, milliequivalents or milliosmols. It must indeed be confusing for them to listen to scientific papers as the speakers glibly reel off these relatively unfamiliar terms.

The importance of this modern terminology used to express body electrolyte concentrations, however, cannot be over-emphasized. As the article points out, the old practice of expressing electrolyte composition of body fluids in terms of milligrams per one hundred millimeters is not adequate, for it does not take into account the relation between anions and cations.

There was a time when only physiologists and biochemists, especially the latter, were interested

in body electrolyte composition. This has all been changed. Today not only the internist, but the surgeon as well, is vitally interested in body electrolyte balance, for, indeed, at times the very life of the patient depends upon it.

There is actually no short cut, presently at least, to express body electrolyte composition in simpler terms. The sesquipedalian terms, milliequivalents and millisosmols hold forth, and we will have to live with them. Thus time marches on.

STATE MEDICAL PLAN DESERVES TRIAL

Generally overlooked in the pressure for legislation incorporating medical care for the aged into the Social Security system is the fact that there already is in operation a federal-state plan designed to meet the need of elderly citizens for assistance in combatting illness.

West Virginia is one of the states which has made a sincere effort to participate in the operation, authorized by the last Congress. At a special session called by Governor Underwood last October the Legislature appropriated money to inaugurate the program. At the 1961 session recently terminated the new Legislature made provision for its continuation through the final quarter of the present fiscal year and the full year beginning July 1.

Because of the newness of the undertaking and the uncertainty of its survival arising from the agitation in Congress for a switch to the Social Security concept, it is understandable that the operation has been somewhat halting. Nevertheless, as of the end of February, Department of Public Assistance records listed 8,498 approved applications for benefits and actual payments of $266,279.07. Designed to deal with emergency medical needs rather than chronic ailments, the program has attracted a steadily increasing number of clients, 2,183 active cases having been added in February.

Oversimplified, the purpose of the Kerr-Mills Act under which this program is functioning is to provide medical care assistance for those over 65 who, while not on relief, do need help in meeting unusual medical expenses. They may earn up to $1,500 a year. They may have modest holdings of stocks or bonds. Still, they are eligible. Hospitals collect the full cost of treatment of such patients, and doctors' fees generally average about 75 per cent of health insurance plan allowances. Of the amount going directly into medical care payments the Federal Government provides $73 for every $27 in state funds. Other costs, such as for administration, are divided on a fifty-fifty basis.

While it is obviously true, as Public Assistance Director W. Bernard Smith says, that we have not had sufficient experience with the system "to make a fair appraisal of it," it seems equally true, as asserted by authorities of both the State Medical Association and the West Virginia Hospital Association, that it's a "step in the right direction."

The very fact that the program is so new is the strongest argument for giving it a fair trial before scrapping it in favor of something wholly untried. It is based on the principles of relieving actual need where it exists, of protecting freedom of choice, of preserving the institution of private medicine, of recognizing state responsibility and requiring state initiative. If these are sound principles, every opportunity to implement them should be afforded. That has not been done. If experience and the process of trial and error prove this plan to be unequal to the need it is time enough to try the other approach. But it would be the height of folly to snuff out in its infancy a promising experiment in meeting a need while preserving established values, especially when the alternative bears all the identifying works of an opening wedge for socialized medicine.—*The Parkersburg News.*

The Age of Country Doctor Passing

The age of the country doctor with his little black bag was indeed a glorious one. It is passing from our American scene, but I see no real reason why we should mourn its passing. A generation of dedicated physicians has worked diligently to create something better, and they deserve recognition of that accomplishment. But more than that, the modern medicine they have handed on is both an opportunity and a challenge to each one of you.

The healing touch of the latter half of the 20th century will require many hands and many minds working together, planning together, dreaming together. In this new scheme we shall have need, more than ever, for the individual mind and spirit.

The sturdiest form of individualism is not created by the mere circumstance which forces a physician to go it alone; it is created by the circumstances which require a physician to work closely with his colleagues without losing the integrity of his own convictions.—Herman E. Hilleboe, M. D., in Federation Bulletin—reprinted from Journal of Medical Education.

Most Americans, particularly males, are scared of death. They're even scared of hangnails. Females are different. After all, they're the creators of human life so they know how to leave it.—James Thurber.

GENERAL NEWS

Drs. Rynearson and Montgomery To Speak at Annual Meeting

Two prominent physicians have been added to the list of guest speakers who will appear on the program at the 94th Annual Meeting of the West Virginia State Medical Association at The Greenbrier in White Sulphur Springs, August 24-26.

Dr. Halvard Wanger of Shepherdstown, chairman of the Program Committee, announced that Drs. Edward H. Rynearson of Rochester, Minnesota, and Thaddeus L. Montgomery of Philadelphia, had accepted invitations to present papers during the three-day meeting.

Edward H. Rynearson, M. D.

T. L. Montgomery, M. D.

Doctor Rynearson, who is Chairman of the Sections on Metabolic Diseases at the Mayo Clinic and Professor of Medicine at the Mayo Foundation for Medical Education and Research, Medical Graduate School, University of Minnesota, will speak at the second general scientific session on Friday, August 25. His subject will be "Use and Abuse of Hormones."

Doctor Rynearson is a native of Pittsburgh, Pennsylvania, and was graduated from Ohio Wesleyan University. He received his M. D. degree from the University of Pittsburgh School of Medicine in 1926, and an M. S. degree in medicine from the University of Minnesota in 1931. In 1952, he was awarded an honorary Doctor of Science degree by Ohio Wesleyan University.

He is a past president of the Endocrine Society and the author of numerous papers which have appeared in scientific journals. He is also the co-author of the book, "Obesity."

Another distinguished speaker will be Dr. Thaddeus L. Montgomery, Professor and Head of the Department of Obstetrics and Gynecology at the Jefferson Medical College of Philadelphia. He will appear as a speaker during the third general scientific session on Saturday morning, August 26, and his subject will be "Labor is for the Baby."

Doctor Montgomery is a native of Macon, Illinois, and was graduated from the University of Illinois in 1917. He received his M. D. degree from Jefferson Medical College in 1920 and served an internship at Jefferson Medical College Hospital, 1922-25.

In 1923, he joined the faculty at Jefferson as assistant demonstrator in the Department of Obstetrics. He was affiliated with that institution for the next 17 years and had been elevated to Clinical Professor of Obstetrics before resigning in 1940 to accept appointment as Professor and Head of the Department of Obstetrics at the Temple University School of Medicine.

Doctor Montgomery returned to Jefferson in 1946 as Professor of Obstetrics and Gynecology and in 1955 was named Chairman of the Department. He also serves as consulting obstetrician and gynecologist to Philadelphia General Hospital and Beebe Hospital in Lewes, Delaware, and as consulting gynecologist to the Vineland Training School in Vineland, New Jersey.

He is a member of the Philadelphia County Medical Society, the Pennsylvania Medical Association and the American Medical Association. He is certified by the American Board of Obstetrics and Gynecology and has served a term as president of the American Association of Obstetricians, Gynecologists and Abdominal Surgeons.

He is the author of numerous papers which have appeared in specialty journals, and is also co-author of the book, "Textbook of Practical Obstetrics," published by the F. A. Davis Company of Philadelphia.

Doctor Montgomery is a member of the Physicians Art Association of America and has won several prizes for water colors at exhibits held in connection with annual meetings of the American Medical Association.

Program Nearing Completion

The program committee announced previously the names of two guest speakers, Dr. Philip Thorek, Clinical Associate Professor of Surgery at the University of Illinois College of Medicine, and Dr. Henry T. Ricketts, who is Professor of Medicine at the University of Chicago School of Medicine.

Another speaker will be Dr. Leonard W. Larson of Bismarck, North Dakota, who will be installed as President of the American Medical Association next

month in New York City. He will speak before the final session of the House of Delegates on Saturday afternoon, August 26.

Further details concerning the annual meeting, including the names of other guest speakers and programs for section meetings which will be held afternoons during the three-day meeting, will appear in future issues of *The Journal*. The complete program will be published in the Convention Number in August.

Heavy Room Reservations At The Greenbrier

Reservations for the 94th Annual Meeting of the West Virginia State Medical Association at The Greenbrier in White Sulphur Springs, August 24-26, are approaching the 300 mark as this issue of *The Journal* goes to press.

The management has again assured Association officials that every effort will be made to arrange accommodations for all those who are interested in attending the convention. It is important, however, that reservations be made as soon as possible so that some idea may be had by the management concerning the total number of rooms that will be needed to house those attending the meeting in August.

Requests for rooms should be mailed directly to the Reservation Manager, The Greenbrier, White Sulphur Springs, W. Va.

TB Meeting in Cincinnati, May 21-25

The joint annual meeting of the National Tuberculosis Association, American Thoracic Society, and National Conference of Tuberculosis Workers will be held at the Netherland Hilton Hotel in Cincinnati, Ohio, May 21-25.

Physicians in West Virginia have been extended a cordial invitation to attend the five-day meeting. The registration desk will open at 10:00 A. M. on Sunday, May 21, and the first scientific session will be held on Monday morning. General sessions will be held mornings and afternoons during the meeting.

Further information concerning the program may be obtained by writing Mr. Thomas A. Deveny, Jr., Executive Director, West Virginia Tuberculosis and Health Association, P. O. Box 341, Charleston 22, West Virginia.

Virginia Chap., AAGP, To Meet in Washington

The 11th Annual Scientific Assembly of the Virginia Academy of General Practice, in conjunction with the District of Columbia Academy of General Practice, will be held at the Sheraton-Park Hotel in Washington, D. C., May 11-14.

Information concerning the scientific program may be obtained by writing the Virginia Academy of General Practice, 4205 Dover Road, Richmond 21, Virginia.

Symposium on Medical Technology In Cleveland, May 25-26

Dr. Reginald F. Krause of Morgantown, professor of biochemistry at the West Virginia University School of Medicine, will be one of four guest speakers in connection with the Symposium on Medical Technology that will be presented at the Frank E. Bunts Educational Institute in Cleveland, Ohio, May 25-26.

The Institute, which is affiliated with the Cleveland Clinic Foundation, has announced that this postgraduate course will be co-sponsored by the Cleveland Society of Technologists.

Doctor Krause will present two papers concerned with laboratory techniques in the diagnosis of vitamin deficiencies.

His first paper, "Part I—The Water-Soluble Vitamins," will be presented at the morning session on May 25, and the second, "Part II—The Fat-Soluble Vitamins," at the morning session on Friday, May 26.

Dr. John B. Hazard, of the department of pathology, Cleveland Clinic Foundation, will participate as a member of the faculty. He will present a paper on "The Cell" at the afternoon session on May 26. He was one of the guest speakers at the 93rd annual meeting of the West Virginia State Medical Association at The Greenbrier in August, 1960.

Registration will be limited to 125, and applications will be honored in the order received. The registration fee is $20.

A complete copy of the program may be obtained by writing Dr. Charles L. Leedham, Director of Education, Frank E. Bunts Educational Institute, 2050 East 93rd Street, Cleveland 6, Ohio.

46th Session of Trudeau TB School At Saranac Lake, June 5-23

The 46th session of the Trudeau School of Tuberculosis and other Pulmonary Diseases will be held at Saranac Lake, New York, June 5-23. This annual postgraduate course for physicians, conducted under the auspices of the Trudeau Foundation and supported by the Hyde Foundation will provide instruction at a minimal tuition of $100 for the three weeks' session.

Attendance at the Trudeau School carries with it a thorough review for specialization in pulmonary disease or for work in public health involving tuberculosis.

It is stated in the announcement of the annual meeting that, in addition to tuberculosis, subjects to be discussed will be silicosis, pulmonary fibrosis, emphysema, fungus infection, sarcoidosis, pneumonias and intrathoracic tumors.

Inquiries should be addressed to Miss Ruth S. West, Secretary, Trudeau School of Tuberculosis and other Pulmonary Diseases, Box 670, Saranac Lake, New York.

Dr. Gevas Inducted as Fellow of ACOG

Dr. George Gevas of Parkersburg was inducted as a Fellow of the American College of Obstetricians and Gynecologists during the annual meeting of that organization in Bal Harbour, Florida, April 20-28.

Annual Meeting, W. Va. Chap., AAGP In Charleston, May 19-21

Twenty distinguished physicians and surgeons have accepted invitations to appear as guest speakers at the Ninth Annual Scientific Assembly of the West Virginia Chapter of the American Academy of General Practice, which will be held at the Civic Center in Charleston, May 19-21.

Dr. Randall Connolly of Vienna, general chairman of the convention, said that more than 300 physicians are expected to register during the three-day meeting.

William A. Sodeman, M. D.

Anthony F. DePalma, M. D.

General scientific sessions will be held mornings and afternoons on Saturday and Sunday, in addition to an afternoon session on Friday, May 19.

Trudeau Society Program

Dr. J. Keith Pickens of Clarksburg, the president, will call the meeting to order officially at 1:45 P.M. on Friday, May 19. Brief addresses of welcome will be delivered by Dr. John W. Hash of Charleston, president of the West Virginia State Medical Association; Dr. William B. Rossman, president of Kanawha Medical Society; and Mr. Charles Lively, executive secretary of the State Medical Association.

The scientific session that afternoon will be devoted to a program sponsored by the West Virginia Trudeau Society. The moderator will be Dr. Julius L. Wilson, Professor of Preventive Medicine at the University of Pennsylvania School of Medicine, who will also present a paper on "Treatment of Tuberculosis as a Preventive Measure."

Other speakers and their subjects are as follows:

2:30—"Medical Management of Pulmonary Emphysema."—Charles E. Andrews, M. D., Associate Professor of Medicine, West Virginia University School of Medicine.

3:00—"Bronchogenic Carcinoma—The Great Imposter."—Edgar W. Davis, M. D., Professor and Head of the Department of Thoracic Surgery, Georgetown University School of Medicine.

4:00—"Radiological Differential Diagnosis of Some Chronic Pulmonary Diseases."—Lewis E. Etter, M. D., Professor and Chairman of the Department of Radiology, University of Pittsburgh School of Medicine.

4:30—Panel Discussion.

Saturday Morning, May 20

The following program has been arranged for the general scientific sessions on Saturday and Sunday, May 20-21:

9:00—"Recent Developments in the Etiology and Chemotherapy of Cancer."—Aaron Arkin, M. D., Clinical Professor of Medicine, University of Illinois School of Medicine.

9:30—"Diagnosis and Treatment of the More Common Endocrinopathies."—Perry S. MacNeal, M. D., Associate Clinical Professor of Medicine, University of Pennsylvania School of Medicine.

10:00—"Changing Brittle to Stable Diabetes."—Thomas H. McGavack, M. D., Martinsburg, W. Va., Professor Emeritus of Clinical Medicine, New York Medical College.

11:00—"What is Lupus Erythematosus?"—Jack D. Myers, M. D., Professor and Chairman of the Department of Medicine, University of Pittsburgh School of Medicine.

11:30—Panel Discussion.

Saturday Afternoon

1:30—"Advances in the Management of Chronic Bronchial Asthma."—Maurice S. Segal, M. D., Clinical Professor of Medicine, Tufts University School of Medicine.

2:00—"The Art of Diagnosis."—William A. Sodeman, M. D., Dean and Professor of Medicine, Jefferson Medical College.

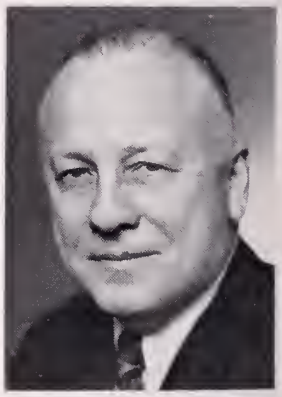
2:30—"Thyroiditis."—Ernest H. Yount, M. D., Professor of Medicine and Chairman of the Department of Internal Medicine, Bowman Gray School of Medicine.

3:30—"The Management of Gastric Ulcers."—Charles M. Caravati, M. D., Professor of Clinical Medicine, Medical College of Virginia.

4:00—"Who, What, Why, When and Where of Health and Illness."—George C. Ham, M. D., Professor and Head of the Department of Psychiatry, University of North Carolina School of Medicine.

4:30—Panel Discussion.

Perry S. MacNeal, M. D.



Thomas H. McGavack, M. D.

Sunday Morning, May 21

9:00—"Prolonged Labor."—N. W. Fugo, M. D., Professor and Chairman of the Department of Obstetrics and Gynecology, West Virginia University School of Medicine.

9:30—"Diabetes in Pregnancy."—D. Frank Kaltreider, M. D., Professor of Obstetrics and Gynecology, University of Maryland School of Medicine.

10:00—"Soft Tissue Injuries of the Cervical Spine."—Anthony F. DePalma, M. D., Professor and Head of the Department of Orthopedic Surgery, Jefferson Medical College.

11:00—"Current Methods for the Management of Patients with Peripheral Arterial Insufficiency."—David M. Hume, M. D., Professor and Chairman of the Department of Surgery, Medical College of Virginia.

11:30—Panel Discussion.

Sunday Afternoon

2:00—"Recent Advances in the Care of Premature Infants."—Richard L. Day, M. D., Professor and Chairman of the Department of Pediatrics, University of Pittsburgh School of Medicine.

2:30—"Current Practice in the Field of Immunization of Children."—Alex J. Steigman, M. D., Professor of Child Health and Chairman of the Department of Pediatrics, University of Louisville School of Medicine.

3:00—"Urinary Tract Infections in Children."—Stuart S. Stevenson, M. D., Professor and Chairman of the Department of Pediatrics, Seton Hall College of Medicine and Dentistry.

3:30—Panel Discussion.

Moderators of Panel Discussions

The following members of the Academy will serve as moderators of panel discussions which will follow the presentation of papers at each general session: Drs. Peter A. Haley of Charleston, Buford W. McNeer of Hinton, L. Dale Simmons of Clarksburg, and Richard C. Wallace of St. Albans.

Doctor Connolly To Be Installed as President

Dr. Randall Connolly of Vienna, the president elect, will be installed as president during the meeting, succeeding Dr. J. Keith Pickens. Other officers are Dr. Don S. Benson of Moundsville, vice president; Dr. Liskie J. Moore of Huntington, secretary; and Dr. Joseph A. Smith of Dunbar, treasurer. Dr. Myer Bogarad of Weirton, immediate past president, is chairman of the Board of Directors, and Dr. Seigle W. Parks of Fairmont, editor of *Mister Doc*, official publication of the Chapter.

Pre-Convention Meetings

The Board of Directors will meet on Thursday afternoon, May 18, and the House of Delegates will be convened at 10 o'clock on Friday morning, May 19. The official order of business will include an address by the president, Doctor Pickens, and reports of officers and chairmen of various committees.

Banquet on Saturday Evening

Dr. Tracy N. Spencer, Jr., of South Charleston, chairman of local arrangements, announced that the annual banquet will be held at the Press Club in Charleston on Saturday evening, May 20.

The speaker will be George K. Eubanks, noted after-dinner speaker, whose subject will be "The Fallacy of After-Dinner Speaking."

A social hour will precede the banquet and a dance for physicians, their wives and guests will be held at the Press Club following the banquet.

Entertainment for Wives of Physicians

Mrs. John W. Hash of Charleston is in charge of an entertainment program that is being arranged for wives of physicians. One of the features of the program will be a luncheon at Berry Hills Country Club on Saturday, at which time a demonstration of flower arrangement in the home will be presented.

New Association Members

Dr. Michael J. Caruso, 404 Peoples Federal Building, Wheeling (Ohio). Doctor Caruso, a native of Clarksburg, was graduated from the West Virginia Institute of Technology and received his M. D. degree from the Georgetown University School of Medicine in 1956. He interned at the Ohio Valley General Hospital in Wheeling, 1956-57, and served a residency there, 1957-60. He was licensed to practice in West Virginia in 1958, and his specialty is internal medicine.

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Dr. Harry L. Craig, Raleigh-Boone Medical Center, Whitesville (Boone). Doctor Craig was born in Otwell, Indiana, and received his M. D. degree from the Indiana University School of Medicine in 1959. He interned at Methodist Hospital in Indianapolis, Indiana, 1959-60, and was licensed to practice in West Virginia in 1960 by reciprocity.

* * * *

Dr. Charles R. Daniel, 1549 Beaumont Road, Drexel Hill, Pennsylvania (Raleigh). Doctor Daniel, a native of Pemberton, West Virginia, attended the two-year School of Medicine at West Virginia University and received his M. D. degree from the Medical College of Virginia in 1956. He interned at Philadelphia General Hospital, 1956-57, and then served with the Medical Corps of the United States Army for two years before being released with the rank of Captain. He is now serving a residency in radiology at the Philadelphia General Hospital.

* * * *

Dr. Richard O. Gale, Grace Hospital, Welch (McDowell). Doctor Gale, a native of Ivor, Virginia, was graduated from the University of Florida and received his M. D. degree from Tulane University School of Medicine in 1940. He interned at Research Hospital in Kansas City, Missouri, 1940-41, and served a residency there, 1941-42. He served with the Medical Corps of the United States Army, 1942-46, and was released with the rank of Major. Formerly located at Syracuse, New York, his specialty is radiology.

* * * *

Dr. Thomas K. Mahan, Beckley Memorial Hospital, Beckley (Raleigh). Doctor Mahan was born in Blytheville, Arkansas, and received his M. D. degree from the University of Tennessee College of Medicine in 1935. He interned at New York Polyclinic Hospital, 1935-37, and served a residency at the Illinois Masonic Hospital, 1945-46. He also had postgraduate work at the Mayo Clinic. He served as a Major in the Medical Corps of the United States Army, 1942-46, and his specialty is radiology.

* * * *

Dr. Richard L. Slack, 2513 Jackson Avenue, Pt. Pleasant (Mason). Doctor Slack, a native of Wheeling, was graduated from West Virginia Wesleyan College in 1950 and received his M. D. degree from the George Washington University School of Medicine in 1954. He interned at the United States Naval Hospital in Bethesda, Maryland, 1954-55, and served a residency at C. & O. Hospital, 1956-60. His specialty is surgery.

Pulmonary Diseases Chair Established At WVU Medical Center

A check in the amount of $10,000 to establish a Chair of Pulmonary Diseases at the West Virginia University School of Medicine was formally presented to University officials on April 8. The contribution was made by the combined membership of the West Virginia Tuberculosis and Health Association and was realized from the sale of Christmas seals.

Occupant of the Chair is Dr. Charles E. Andrews, who recently joined the faculty as an Associate Professor of Medicine. He is an authority in the field of chest diseases and formerly served as a member of the faculty at the University of Kansas School of Medicine.

The first contribution toward the support of the new Chair was presented to Dr. Kenneth E. Penrod, Vice President-Medical Affairs, by Mr. Hupp E. Otto of Wheeling, president of the West Virginia Tuberculosis and Health Association.

The presentation climaxed preparations which began in 1956, when a professorship in chest diseases at the Medical Center was first recommended by the West Virginia Trudeau Society. Five other states in the country have established similar medical programs.

In presenting the check to the Medical Center, Mr. Otto expressed pleasure in being able to initiate the program aiding the WVU School of Medicine, which he termed a "vital factor in the growth of the state." He said the gift was made possible by the cooperation of 35 local tuberculosis associations, which have contributed a total of $22,934.83.

In response, Doctor Penrod said, "I think that this is a marvelous gesture on the part of this very worthwhile organization and represents what to me is the most important way in which an organization can help—by investing in people. Through federal and other research support mechanisms, money is generally available to support research programs. The most difficult component for a medical center to develop and support is first class people. For that reason, the decision to establish a professorship in pulmonary diseases has far-reaching research possibilities."

Other persons participating in the ceremony at the Medical Center included Dr. Clark K. Sleeth, Dean of the School of Medicine; Dr. J. J. Lawless, Director of the University Health Service; and the following officers of the West Virginia Tuberculosis and Health Association: Dr. Ralph H. Nestmann of Charleston, immediate past president; Dr. G. Ralph Maxwell of Morgantown, director; Mr. Robert S. Meighen of Weirton, secretary; Mr. Robert C. Hawkins of Charleston, treasurer; and Mr. Thomas A. Deveny, Jr., of Charleston, executive director.

Oph. and Otol. Section Accepting Papers for SMA Meeting

The Section of Ophthalmology and Otolaryngology of the Southern Medical Association has announced that it is now accepting papers from physicians practicing either specialty, living in the area embraced within the Southern Medical Association, for consideration in connection with presentation at the annual meeting which will be held in Dallas, Texas, November 6-9, 1961.

The entire paper or an abstract thereof should be mailed as soon as possible to the secretary, Albert C. Esposito, M.D., 1212 First Huntington National Bank Building, Huntington 1, West Virginia.

Dr. J. L. Thompson Speaker at Safety Meeting

Dr. James L. Thompson of Weirton presented a paper at the annual meeting of the Texas Safety Association which was held in Houston on March 27.

Doctor Thompson, who is Medical Director of Weirton Steel Company, discussed "Occupational Medicine —Its Role in Your Safety Program." More than three hundred representatives from industry, government, education and medicine attended the meeting.

A check for $10,000 to establish the West Virginia Tuberculosis and Health Association Chair of Pulmonary Diseases at the West Virginia University School of Medicine was presented to University officials during a ceremony at the Medical Center in Morgantown on April 8. Shown above are, left to right, Dr. Clark K. Sleeth, Dean of the School of Medicine; Dr. Charles E. Andrews, Associate Professor of Medicine and occupant of the Chair; Mr. Hupp E. Otto of Wheeling, president of the Association; Vice President Kenneth E. Penrod; Mr. Thomas A. Deveny, Jr., Executive Director of the Association; Dr. G. Ralph Maxwell of Morgantown, director; and Dr. Ralph H. Nestmann of Charleston, immediate past president (Photo courtesy of the WVU Bureau of Information).

12th Annual B-R-T PG Meeting In Elkins, June 15

The 12th annual postgraduate meeting of the Barbour-Randolph-Tucker Medical Society will be held at the Elks Country Club near Elkins on Thursday, June 15, 1961. The meeting will be co-sponsored by the West Virginia Chapter of the American Academy of General Practice.

Bell Irvin Wiley

The annual golf tournament is scheduled for the morning, with play starting at nine o'clock and ending at noon (EST). No formal luncheon is scheduled, but if desired lunch may be obtained at the Club House.

Dr. Herman Seltz of Elkins and Dr. Homer D. Martin of Dailey will be co-chairmen of the scientific session which will get under way at 1:30 P. M., with Dr. William G. Klingberg of Morgantown, Professor and Chairman of the Department of Pediatrics at the West Virginia University School of Medicine, as speaker. His subject will be, "Emergencies in the Newborn, Including Jaundice."

The remainder of the afternoon program will be as follows:

"Urinary Tract Infections in Children."—Matthew Marshall, M. D., Assistant Professor of Urology, University of Pittsburgh School of Medicine.

"Plastic Problems of Rehabilitation in Children, and Facial Fractures."—Gordon Letterman, M.D., Professor of Plastic Surgery, George Washington University School of Medicine.

"The Pathogenesis and Treatment of Acne Vulgaris."—Jordon White, M.D., Assistant Professor of Dermatology, Temple University School of Medicine.

The fifth speaker on the afternoon program will be Dr. Clark K. Sleeth of Morgantown, Dean of West Virginia University School of Medicine. His subject will be announced. Doctor Sleeth will moderate the afternoon program and lead the panel discussion.

Bell Irvin Wiley Banquet Speaker

There will be a social hour at five-thirty and the annual banquet will follow at six-thirty.

Addresses of welcome will be delivered by Dr. John L. Rittmeyer of Philippi, president of the Barbour-Randolph-Tucker Medical Society, and Dr. J. Keith Pickens of Clarksburg, president of the West Virginia Academy of General Practice.

Jim Comstock of Richwood, editor of *The Hillbilly*, will be the toastmaster, and the banquet speaker will be Bell Irvin Wiley of Atlanta, Georgia, professor of history at Emory University in that city. His subject will be "The Memorable War."

The centennial of the Battle of Philippi will be observed the first week in June, and the Battle of Rich Mountain on June 11. Rich Mountain may be seen from the porch of the Club House.

Further information concerning the annual B-R-T meeting will appear in a news story in the June issue of *The Journal*.

Maintaining the Health of 'Well' Patients

During 1960, almost one out of every five contacts between U. S. patients and physicians in private practice did not involve actual sickness or injury. Figures released by the National Disease and Therapeutic Index (N.D.T.I.), a continuing statistical survey of private medical practice, attributed 18 per cent of all patient visits to special conditions without sickness. Prominent among these special conditions were prenatal care, inoculations and various examinations.

In total, they accounted for more trips to the doctor than either of the two leading disease categories, respiratory and circulatory disorders. N.D.T.I. results point up a major role of the American physician in maintaining the good health of "well" patients. N.D.T.I. collected data from approximately 2700 doctors during 1960. The study estimated a grand total of 972 million individual diagnoses were made by physicians for private patients in the U. S. last year.

International Film Exposition During AMA Meeting in June

One of the features at the 110th annual meeting of the American Medical Association in New York City, June 25-30, will be a series of outstanding medical films from all parts of the world.

More than fifty medical films will be shown during this second U. S. International Medical Film Exposition, which is being coordinated by the AMA Department of Medical Motion Pictures and Television in cooperation with the Johnson & Johnson Company. Films will be shown throughout the meeting at the New York Coliseum.

The film exposition will include a number of film forums in which international medical experts will participate as panelists. One such film forum will cover selective coronary cinearteriography. Others will deal with neurological examinations of children. and obstetrics and gynecology.

Further information concerning the film exhibit may be obtained by writing Mr. Ralph Greer, AMA Department of Medical Motion Pictures and Television, 535 North Dearborn Street, Chicago 10, Illinois.

Research Forum During AMA Meeting

The first Multiple Discipline Research Forum of the American Medical Association will be one of the highlights of the 110th annual meeting in New York City, June 25-30.

The Forum, embracing 15 branches of medicine, will include reviews of past research, brief reports on new research, and discussions of future trends in research at general sessions on Tuesday, Wednesday and Thursday, June 27-29, in the New York Coliseum.

'Child Growth—Development' Subjects Of Seminar at WVU, June 21-22

The State Department of Health and the State Department of Public Assistance will co-sponsor the 1961 Seminar on "Growth and Development—The Child: Age 6 to 12," which will be held on June 21-22, 1961, in the auditorium of the West Virginia University Medical Center at Morgantown.

Prominent speakers will participate in the conference and discuss the normal and abnormal aspects of the physical and mental growth of the 6 to 12 year-old child. The cultural and social development as it relates to this age group will also be discussed.

The meeting will be called to order at 9:30 A. M. on Wednesday, June 21, by Dr. Clark K. Sleeth, Dean of the West Virginia University School of Medicine, and an address of welcome will be delivered by W. Bernard Smith, Director of the State Department of Public Assistance.

Dr. N. H. Dyer, Director of the State Department of Health, will be the first speaker and his subject will be "Summary of Seminar on Growth and Development of the Pre-School Child."

The keynote address will be delivered by Arthur J. Lesser of Washington, D. C., Director of the Division of Health Services, Department of Health, Education and Welfare. His subject will be "Health Services —Accomplishments and Outlook."

Wednesday Afternoon, June 21

The program for the remainder of the two-day meeting will be as follows:

1:00—"Normal Growth and Development of the 6 to 12 Year-old With Emphasis on the Physical Growth."—William G. Klingberg, M. D., Professor and Chairman of the Department of Pediatrics, WVU School of Medicine.

1:45—"Personality Development of the 6 to 12 Year-old."—John B. Reinhart, M. D., Associate Professor of Pediatrics and Child Psychiatry, University of Pittsburgh School of Medicine.

2:45—"Cultural and Social Development as Related to the 6 to 12 Year-Old."—Dr. Otto Von Mering, Social Professor of Anthropology, University of Pittsburgh.

3:30-4:30—Discussion Period.

Thursday Morning, June 22

9:00—"Development of Skills in the Exceptional Child."—L. Leon Reid, Ph.D., Department of Special Education and Rehabilitation, University of Pittsburgh.

9:45—"Effects of Physical Handicaps on Personality Development in Children."—Edward M. Litin, M. D., Consultant, Section of Psychiatry, Mayo Clinic, Rochester, Minnesota.

10:45—"The Counseling of Parents of the 6 to 12 Year-old."—Miss Muriel W. Brown, Parent Education Specialist in Division of Research, Children's Bureau, Washington, D. C.

11:30—Discussion Period.

Thursday Afternoon

1:30—"Accident Prevention with Emphasis on the Young School-Age Child."—Miss Elizabeth Kasey, Safety Consultant, Metropolitan Life Insurance Company, New York, N. Y.

2:15—"Summary of Second Seminar."—Madeleine E. Morcy, M. D., Regional Medical Director, Children's Bureau, Charlottesville, Virginia.

The following persons will serve as moderators during the two-day meeting:

Dr. Clark K. Sleeth, Dean, WVU School of Medicine; Dr. M. A. Viggiano, Health Officer, Monongalia County Health Department; Mr. L. L. Vincent, Assistant Director, State Department of Public Assistance; and Mrs. Mae S. Straton, Assistant Chief, Division of Crippled Children's Service, Department of Public Assistance.

Co-chairmen of the local committee on arrangements are Doctor Viggiano and Mrs. Edna J. Hardin, Director of the Monongalia County Department of Public Assistance.

Dr. Herbert E. Warden Elected Member Of University Surgeons Group

Dr. Herbert E. Warden, Associate Professor of Surgery at the WVU School of Medicine, has been elected a member of the Society of University Surgeons. The Society is made up of approximately 250 surgeons in teaching institutions who have demonstrated an interest in research, in addition to practicing and teaching.

The purpose of the Society is to advance surgery by encouraging research and providing for communication between surgeons. Dr. Bernard Zimmerman, Professor and Chairman of the Department of Surgery at the WVU School of Medicine, also is a member of the organization.

Doctor Warden, who joined the faculty of the School of Medicine last July, received the Albert Lasker Award for Medical Research from the American Public Health Association in 1955.

State Physicians Participate In Television Debate

Two Huntington physicians, Drs. James S. Klumpp and Walter R. Wilkinson, participated in a television debate on April 6 with two area labor leaders on the question, "Should Medical Care for the Aged Be Placed Under Social Security?" The debate is a two-part affair, with the second half to be televised by WHTN-TV, in Huntington, on June 1.

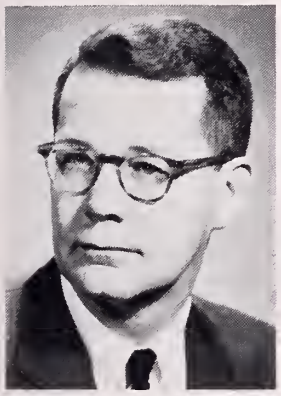
Doctor Klumpp is a past president of the State Medical Association and is currently serving as chairman of the Association's Medical Economics Committee. Doctor Wilkinson is co-chairman of the Public Relations Committee of the Cabell County Medical Society.

Their opponents in the debate were the state director of the International Ladies Garment Workers Union and the president of the Huntington District Labor Council, AFL-CIO.

Husband-Wife Team To Join Faculty At WVU School of Medicine

The appointment of a husband and wife team to the faculty at the West Virginia University School of Medicine was announced last month by Acting University President Clyde L. Colson.

Dr. Wilhelm S. Albrink has accepted appointment as Professor and Chairman of the Department of Pathology, and his wife, Dr. Margaret Albrink, was appointed Associate Professor of Medicine. Both have been serving on the faculty at the Yale University School of Medicine and they will join the University faculty on July 1.



Wilhelm S. Albrink, M. D.

Margaret Albrink, M. D.

Dr. Wilhelm Albrink will succeed Dr. Milford L. Hobbs, whose resignation as Chairman of the Department of Pathology will become effective on June 30.

Doctor Albrink was graduated from Oberlin College, Oberlin, Ohio, and received M. D. and Ph.D. degrees from Yale. He joined the faculty of the Yale University School of Medicine in 1937 and has been Associate Professor in the Department of Pathology there since 1956. He also is consultant to the United States Army Chemical Corps and the United States Public Health Service Communicable Disease Center, and is attending pathologist at the Grace-New Haven (Connecticut) Community Hospital.

He is certified by the American Board of Pathology and is a member of the American Association of Pathologists and Bacteriologists, International Academy of Pathology, American Association for Cancer Research, Tissue Culture Association and a number of other professional organizations. He is the author and co-author of many scientific articles published in various specialty journals.

Dr. Margaret Albrink, who has served as a member of the faculty at Yale since 1943 and has been an Assistant Professor of Medicine there since 1958, was graduated from Radcliffe College in Cambridge, Massachusetts. She received her M. D. degree from the Yale University School of Medicine and was also awarded a Master of Public Health Degree by that institution.

She is an established investigator with the American Heart Association and is supported, professionally, by a continuing grant of research funds from that organization. She is active in research work and is the author of numerous papers on the relationship of cholesterol and heart disease. She will serve primarily in a research capacity.

The Albrinks are parents of three children.

Relocations

Dr. Alberto Adam, formerly of Charleston, has accepted appointment as instructor in thoracic surgery at the Hahnemann Medical College, Philadelphia. He is also associated in the practice of thoracic and cardiovascular surgery with Drs. Henry T. Nichols, Dryden P. Morse and Gumersindo Blanco. Doctor Adam's new address is 230 North Broad Street, Philadelphia 2, Pennsylvania.

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Dr. Alex G. Carabia of Huntington has accepted appointment as director of laboratories at the Oak Ridge Hospital in Oak Ridge, Tennessee, effective May 1, 1961. Doctor Carabia has engaged in the practice of his specialty of pathology at Huntington since 1958.

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Dr. W. T. Booher, Jr., of Wellsburg, who has served for the past two years with the Medical Corps of the United States Army at the Indiantown Gap Military Reservation in Annville, Pennsylvania, was released from the service on April 4 with the rank of Captain. His office address in Wellsburg is 69 8th Street.

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Dr. Theodore B. Rheney of Oceana, who has been affiliated with the Oceana Medical Center, has moved to Farmington, Iowa, where he will continue in general practice.

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Dr. William R. Wolverton of Kingwood has moved to Cumberland, Maryland, where he will continue the practice of his specialty of orthopedic surgery.

Abstracts of Papers for 1962 AMA Meeting Due Oct. 15

The deadline for submitting titles and brief abstracts of scientific papers for presentation at the 1962 annual meeting of the American Medical Association in Chicago is October 15, 1961.

The AMA meeting in 1962 will be held in Chicago's new $35,000,000 exposition center on Lake Michigan, which has 300,000 square feet of exhibit space alone. Dates for the 1962 meeting are June 11-15.

Dr. Samuel P. Newman of Denver, Colorado, chairman of the Council on Scientific Assembly, announced that that group is interested in receiving as many titles and abstracts as possible, "because in that way we have better selection and this, in turn, assures a more timely and better scientific program."

Young Physicians Receive AMA News

Interns and residents in all approved hospitals in the United States receive complimentary subscriptions to *The AMA News*. Medical students enrolled in the 86 medical schools also are placed on the mailing list upon request to the AMA Circulation and Records Department.

Conference on Disaster Medical Care In New York City, June 24

The 9th annual Conference on Disaster Medical Care will be held at the Statler-Hilton Hotel in New York City on Saturday, June 24. The theme of the meeting will be "Defense Training for All—A Resource for National Defense."

The one-day meeting will be sponsored by the American Medical Association's Council on National Security, and the program will be developed by the U. S. Air Force Medical Service.

Following opening remarks by Dr. Leonard W. Larson of Bismarck, N. D., AMA president elect, Major General O. K. Niess, Surgeon General of the U. S. Air Force, will discuss the adaptability of military medical experience, research, and operations in civilian disasters.

The morning session will include discussions on Nuclear War and Your Community, The Value of Training and Exercises, Transportation of the Injured, and Communications.

The afternoon session will feature discussions on Radiation Fallout Detection and Monitoring, Evaluating Homes, Buildings and Other Shelters, and other techniques for survival in the event of natural disaster or enemy attack.

Physicians interested in attending the one-day Conference may obtain additional information by writing to the AMA Council on National Security, 535 North Dearborn Street, Chicago 10, Illinois.

WVU Pediatrics Department Conducting Weekly Clinical Conferences

The Department of Pediatrics at the West Virginia University School of Medicine is conducting weekly Clinical Conferences and Pediatric Grand Rounds. The first conference was held on April 13 and grand rounds will be held each Saturday beginning at 11 A. M.

The programs will be made up of case presentations and discussions, reviews of various subjects, pathology presentations, etc. The Department also has announced that at one conference each month there will be a combined obstetrics-pediatrics-pathology conference to discuss mutual problems in the newborn area.

Dr. William G. Klingberg, Professor and Chairman of the Department, has extended a cordial invitation to state physicians to attend the weekly conferences.

School Health Meeting in New York City

A joint meeting of the American School Health Association and the American Medical Association will be held at the Park-Sheraton Hotel in New York City on Sunday evening, June 25.

The purpose of the meeting is to provide an opportunity for physicians and ASHA members to discuss common health problems. All practicing physicians are cordially invited to attend the session.

Medical Meetings, 1961

The following is a partial list of national, state and district medical meetings scheduled for 1961:

May 5-7—Am. Soc. Internal Med., Miami Beach.
May 8-12—Am. Coll. Physicians, Miami Beach.
May 10-12—W. Va. PH Assn., Clarksburg.
May 19-21—W. Va. Chap. AAGP, Civic Center, Charleston.
May 22-25—Am. Urological Assn., Los Angeles.
June 22-26—ACCP, Hotel Commodore, New York City.
June 26-30—Annual Meeting, AMA, New York City.
July 12-13—Rocky Mountain Cancer Conference, Denver, Colo.
July 23-26—W. Va. Dental Assn., White Sulphur Springs.
Aug. 24-26—W. Va. State Medical Association, The Greenbrier, White Sulphur Springs.
Oct. 2-6—Am. Coll. Surgeons, Chicago.
Oct. 5—Rural Health Conference, Jackson's Mill.
Oct. 18—W. Va. St. Nurses Assn., Clarksburg.
Oct. 19-21—W. Va. Hospital Assn., Morgantown.
Oct. 27-29—PG Institute, Martinsburg.
Nov. 6-9—Southern Medical Assn., Dallas, Texas.
Nov. 11—Pediatric Conference, WVU School of Medicine, Morgantown.
Nov. 28-Dec. 1—AMA Clinical Meeting, Denver.

Auto Emblems Available

A supply of auto emblems, bearing the insignia of the West Virginia State Medical Association, is kept on hand at all times at the headquarters offices in Charleston. The price of each emblem is $3.25 postpaid.

MLB Licenses 22 Physicians As Result Of Winter Meeting in Charleston

The Medical Licensing Board has announced that 22 physicians have been licensed to practice in West Virginia as a result of an examination held in Charleston, January 9-11, 1961.

The following physicians were licensed by examination during the meeting:

Berlow, Abraham Joseph, Montgomery
Chan, Narcisco, Huntington
Lambrechts, Marcel G., So. Charleston
Morales, Alfonso, Welch
Santa Rita, Samuel Dayag, Mullens
Tapia-Ruano, Eduardo, Spencer
Vazquez, Joseph Gilberto, Man
Vazquez, Luis A., Wheeling
Weiler, Robert Richards, Pittsburgh, Pa.

The following is a list of physicians licensed by reciprocity:

Adams, John McLauchlin, Winchester, Va.
Beckner, Thornton Arnold, Man
Birmingham, Daniel John, Bellaire, Ohio
Conn, Rex Boland, Jr., Morgantown
de Prume, Francois Jehin, Keyser
Evans, James Herbert, Jr., Oakland, Md.
Fee, Norman Francis, Man
Gow, Robert Campbell, Elkins
Jankoska, Richard Lyle, Elkins
Kennedy, Fred Arnold, Hopemont
Mowlem, Albert, Clarksburg
Sexton, James Kermit, Whitesville
Tyminski, Henry Herman, Cedar Grove

The spring meeting of the Medical Licensing Board was held in Charleston on April 10, and the summer meeting will be held in that city, July 10-12, 1961.

Dr. Albert C. Esposito Named President Of W. Va. Acad., Oph. & Otol.

Dr. Albert C. Esposito of Huntington was elected President of the West Virginia Academy of Ophthalmology and Otolaryngology during the 14th Annual Meeting of that organization at The Greenbrier in White Sulphur Springs, April 6-8. He succeeds Dr. John A. B. Holt of Charleston. Other new officers are as follows:

Dr. William K. Marple of Huntington, president elect; Dr. James T. Spencer of Charleston, vice president; and Dr. Worthy W. McKinney of Beckley, secretary-treasurer.

Drs. R. Alan Fawcett of Wheeling and Ralph W. Ryan of Morgantown were named directors. Two past presidents, Doctor Holt of Charleston and Dr. N. K. Joseph of Wheeling, were named members of the Executive Committee.

The new president is currently serving as secretary of the Section on Ophthalmology of the Southern Medical Association and is also an associate councillor to that organization from West Virginia. He is a past president of the Cabell County Medical Society and is a member of the Council of the West Virginia State Medical Association.

Record Attendance

More than 175 persons attended the three-day meeting, including 94 physicians. The registration list included one physician and his wife from Hawaii.

The scientific program included papers presented by four prominent out-of-state physicians. The speakers were as follows:

Drs. Harvey E. Thorpe of Pittsburgh, Irving H. Leopold and F. Johnson Putney of Philadelphia, and John J. Shea of Memphis, Tennessee.

In addition, Mr. Philip Salvatori of Obrig Laboratories presented a demonstration of the various techniques of contact lens fittings.

Guest speakers at the 14th annual meeting of the West Virginia Academy of Ophthalmology and Otolaryngology included, left to right, Dr. Floyd J. Putney of Philadelphia, Dr. Harvey E. Thorpe of Pittshurgh, Mr. Philip L. Salvatori of New York City, Dr. John J. Shea, Jr., of Memphis, Tennessee, and Dr. Irving H. Leopold of Philadelphia.

The 15th annual meeting of the Academy will be held at The Greenbrier in White Sulphur Springs, April 23-25, 1962.

Otol. PG Course in Chicago, Sept. 23-30

The Department of Otolaryngology at the University of Illinois College of Medicine will offer a postgraduate course for practicing otolaryngologists in Chicago, September 23-30. The course is designed to bring to specialists a wide variety of current advances in management, therapy and philosophies. The program will be under the direction of Dr. Emanuel N. Skolnik, Associate Professor of Otolaryngology.

Further information may be obtained by writing to the Department of Otolaryngology, University of Illinois College of Medicine, 1853 West Polk Street, Chicago 12, Illinois.

New officers of the West Virginia Academy of Ophthalmology and Otolaryngology are, left to right, Dr. N. K. Joseph of Wheeling, past president and a member of the executive committee; Dr. William K. Marple of Huntington, president elect; Dr. John A. B. Holt of Charleston, immediate past president and a member of the executive committee; Dr. Albert C. Esposito of Huntington, president; Dr. W. W. McKinney of Beckley, secretary-treasurer, Dr. James T. Spencer of Charleston, vice president; and Dr. R. Alan Fawcett of Wheeling, director.

Rocky Mountain Cancer Conference In Denver, July 12-13

The 15th Annual Rocky Mountain Cancer Conference will be held at the Brown Palace West in Denver, Colorado, July 12-13. The conference is co-sponsored annually by the Colorado Division of the American Cancer Society and the Colorado State Medical Society.

The program at the morning sessions will be devoted to panel discussions on "Detect Cancer in Time!—Procedures, Problems and Solutions," and "Neoplasms of the Female Genital Tract." The panel discussions will be followed by roundtable luncheons with speakers. Individual papers will be delivered during the afternoon sessions

The guest speakers will include Dr. Ulrich R. Bryner of Salt Lake City, Utah, Dr. Vincent P. Collins of Houston, Texas, Dr. William Dock of Brooklyn, New York, Dr. Manuel E. Lichtenstein of Chicago, Illinois, Dr. John R. McDonald of Detroit, Michigan, and Dr. John A. Wall of Houston, Texas.

Further information may be obtained by writing the Rocky Mountain Cancer Conference, 835 Republic Building, Denver 2, Colorado.

New Health Directory Published

A new health directory has been published by the Graduate School of Business and Public Administration at Cornell University, and is entitled "Health Organizations of the United States and Canada; National, State and Regional." The directory contains an up-to-date listing of voluntary associations, professional societies, and other groups concerned with health, medical, hospital, pharmaceutical and related fields.

The price of the directory is $10.00 and copies may be obtained by writing the Publications Section, Graduate School of Business and Public Administration, Cornell University, Ithaca, New York.

Dr. Frederick J. Stare To Receive 1961 Goldberger Award

Dr. Frederick J. Stare of Boston, Massachusetts, chairman of the Department of Nutrition at Harvard University since its origin in 1942, has been selected to receive the 1961 Joseph Goldberger Award for outstanding work in the field of Clinical Nutrition. Announcement of the award was made recently by the Board of Trustees of the American Medical Association.

The award consists of a plaque and $1,000, which will be presented to Doctor Stare before the AMA House of Delegates during the Annual Meeting in New York City in June. Doctor Stare will deliver the Annual Goldberger Lecture on Tuesday, June 27.

Film on SS HOPE Available For Public Showings

A story of medical training and teaching in Southeast Asia is depicted in a new and dramatic 27-minute color motion picture documentary made available by Project HOPE. The film, "Voyage of the SS HOPE," tells the story of the American people's floating medical center currently in Indonesia.

The story line is that of the SS HOPE I, a former U. S. Navy hospital ship converted to a floating medical school through the contributions of the American people. The SS HOPE is the principal vehicle of the People-to-People Health Foundation, Inc., 1818 M Street, N. W., Washington 6, D. C.

Currently the vessel is visiting ports and islands in Indonesia—a nation consisting of more than 3,000 islands—on its first voyage to help other peoples to help themselves.

The film is available for showings before county medical societies and other interested groups. Requests for the film should be mailed directly to the Film Department, Project HOPE, 1818 M Street, N. W., Washington 6, D. C.

A meeting of the Rural Health Committee of the West Virginia State Medical Association was held at the Laurel Court Restaurant, near Sutton, on Sunday, April 9. Left to right, Drs. O. M. Harper, Clendenin, John W. Trenton, Kingwood, Charles E. Staats, Chairman, Charleston, S. C. Dotson, Jr., Morgantown, J. M. Brand, Chester, and R. W. Cronlund, Philippi.

Blood Bank Association To Meet In Parkersburg, May 7

An organization meeting of the West Virginia Association of Blood Banks will be held at St. Joseph's Hospital in Parkersburg on May 7.

The organization is a non-profit association of blood banks, the banks themselves being the voting members through the physician-directors. This policy is in accordance with other state blood bank associations and the West Virginia group will therefore be a component society of the American Association of Blood Banks.

The purposes of the Association are to promote the best possible blood banking procedures, to promote seminars and refresher workshops for educational purposes, and to work for the efficient collection, distribution and safe use of blood throughout the state.

Dr. Robert A. McDougal of Parkersburg is the chairman of the Executive Committee, and the other members are Drs. David B. Thornburgh and Charles W. Thacker, Rosalind Smith, M. T., A.S.C.P., and Sue Whipkey, M. T.

Dr. James P. Baker To Present Paper At ACP Meeting in Miami Beach

Dr. James P. Baker of White Sulphur Springs will participate in a panel discussion during the 42nd annual meeting of the American College of Physicians which will be held at the Americana Hotel in Miami Beach, Florida, May 8-12.

Doctor Baker, who is medical director of The Greenbrier Clinic, will be among five College members who will discuss "The Health Problems of the American People." His particular subject will be "A Discussion of Executive Health."

Other panelists include Drs. Howard A. Rusk and Norman Plummer of New York City, William B. Terhune of New Canaan, Connecticut, and Lemuel C. McGee of Wilmington, Delaware.

Dr. Chester S. Keefer of Boston, president of the College, will preside during the five-day meeting. The program will follow the pattern of the past several years and will include sessions on basic science and clinical investigation.

Film on Cancer Detection Examination

A film, "The Cancer Detection Examination," is available for showings before county medical societies and other professional groups. Produced by Eli Lilly and Company, the film presents Dr. Emerson Day, Director of Strang Clinic, Memorial Center for Cancer and Allied Diseases in New York City, demonstrating the examination for presymptomatic cancer detection as it can be performed through standard office procedures.

Showing time for the 16mm black and white film is 46 minutes. Requests for the film should be made directly to Eli Lilly and Company, Department M-498, P. O. Box 814, Indianapolis 6, Indiana.

Two-Week Camping Period Planned At Camp Kno-Koma

Camp Kno-Koma, a summer camp for diabetic children, will be open again this year during a two-week period, July 23 to August 5. The camp is located at the Galahad site on Blue Creek in Kanawha County and is designed specifically to meet the needs of diabetic campers.

Children between the ages of 7 and 15 are invited to attend Camp Kno-Koma free of charge. The camp

Handicraft classes are among the many activities planned for children attending Camp Kno-Koma, a summer camp for diabetic children. The camp will be open during a two-week period, July 23 to August 5, and children between the ages of 7 and 15 are eligible to attend.

is operated on a non-profit basis and maintained through donations from individuals and groups. In past years, several component medical societies and auxiliaries of the State Medical Association have sponsored children at the camp.

The camp supplies all of the insulin, food and dietitian services, as well as the services of physicians and nurses. Included in the camping program are swimming, badminton, nature hikes, archery, handicraft classes and other activities found at summer camps.

West Virginia physicians are cordially invited to enroll their young diabetic patients in the camp. Registration is limited and physicians are urged to have their patients apply as soon as possible.

Application forms may be obtained by writing to Camp Kno-Koma, 1115 Quarrier Street, Charleston 1, W. Va.

Spreading Contentment

The work that men do is an essential part of their lives, not mainly because a man's job gives him stature and binds him to society. The worker who is happy in his job, with confidence in his management and cooperative relations with his co-workers, will spread his contentment throughout the community.—Dr. Ralph T. Collins.

The average man's idea of a good sermon is one that goes over his head and hits a neighbor.—Anon.

Preston County Medical Society Plans Summer Meeting in Kingwood

The 7th annual all day summer meeting of the Preston County Medical Society will be held at the Preston Country Club near Kingwood on Thursday, June 22.

Besides the scientific program, the day will be devoted to various sports, including fishing, archery, golf and trap and skeet shooting tournaments.

There will be interesting industrial exhibits by drug and accessory houses.

The all day meeting will close with the annual banquet which will be served in the Club House at 6:30 o'clock.

Arrangements for the meeting are being made by the general chairman, Dr. W. P. Johnson of Arthurdale.

New Address?

Members of the West Virginia State Medical Association are requested to notify the headquarters offices promptly concerning any change in address. Notices should be mailed to Box 1031, Charleston 24, West Virginia.

Modern Rehabilitation

Rehabilitation is a multidisciplined and multifaceted aspect of health and disease. It has grown markedly in the past two generations. One can almost measure a civilization's progress by its willingness to restore the sick and the maimed.

Rehabilitation is not only economically sound today but is becoming an economic necessity. We all need to learn much more of the many cases amenable to rehabilitation; to know what consultation to seek; when to seek it, and how to use it, whether for physical or mental reasons or both.

The pressures of society, through law, are demanding better restoration, better medical care, better rehabilitation. We in the health professions must be alert to these demands—we must lead them into constructive areas and keep them economically feasible.

Those of us in industry whose primary concern is with the occupationally connected health problems of our working population must constantly re-examine our methods and our attitudes toward rehabilitation. I believe all of us need to do a more complete and effective job in the psychosocial area of rehabilitation.

We must counsel with the injured workman right from the start of his treatment by answering his fears and doubts, telling him what is to be done for him on a program of medical treatment and rehabilitation, what he can reasonably expect and when; and what is planned for him upon his return to productive employment. If we could just place ourselves in his position, I think all the answers to the questions would readily present themselves.—D. John Lauer, M. D., in Industrial Medicine and Surgery.

That 'Debasing' Means Test

One of the most often heard statements made by opponents of the Eisenhower method of financing the illness of the aged was that a means test is necessary and that such a test is degrading, debasing, embarrassing, etc. We understand that a means test is simply a confidential (not publicized) inquiry as to one's income and assets. We wonder what is so derogatory about that. As a matter of fact, it is a very common procedure for many purposes.

One cannot get any form of public or private assistance without it. It is used when you want a loan or when you want to rent a house or an apartment or when you want to cash a check. Those nominated for high governmental offices must tell a Senate committee what holdings they possess, and often these are published in the newspapers.

A means test for public assistance is essential for protecting the taxpayer (you and me). Should we pay for the subsistence or expense of illness for someone who can afford to pay for it himself?

Now, there may be things that are wrong with some means tests, and these should certainly be corrected. If, in order to get public assistance for any purpose, one has to forfeit a small income or sell his home, the rules are wrong. When one's special needs have been met he must have some means of support. If he comes back destitute he again becomes a ward of the public.

Surely in some places the means test must be liberalized, but that is no reason why there should be no means test. We criticize— and we believe justifiably so—the way in which veterans may get hospitalization in a Veterans Administration institution merely by signing a statement that they are unable to pay for it. Why should not a means test be applied here? The needy should be cared for, but in our free enterprise system those who can pay should pay. In order to make the payment of medical expense easier, we, the physicians, have created the Blue Cross-Blue Shield Plans.

Surely there are still other ways of helping those in trouble besides the Government handout, except in the case of the truly indigent. We see nothing debasing in the application of a means test for whatever purpose.—Medical Annals of the District of Columbia.

Public Health Assn. Meeting In Clarksburg, May 10-12

The 37th Annual Meeting of the West Virginia Public Health Association will be held at the Hotel Waldo in Clarksburg, May 10-12.

The meeting was originally scheduled to be held in Morgantown, but was rescheduled for Clarksburg because the meeting conflicted with another function at the University.

Dr. B. S. Brake of Clarksburg, the president, has extended a cordial invitation to all state physicians to attend the three-day meeting.

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School Problems*†

Earl H. Baxter, M. D.

Every child is a potential school problem in his attempt to adjust to his school environment. Although the title "School Problems" covers a wide range of the various aspects of physical health through all sorts of psychological problems that may develop both from the home and the school, this discussion will be confined mainly to "Why doesn't Johnny do well in school?" There also will be excluded those children who have pronounced mental retardation and those who have extensive physical defects that handicap their ability to learn.

The learning process begins at birth and continues throughout life. Since the individual acquires about one-half of his total life's knowledge within the first three or four years, it becomes apparent that by the time he starts to school he already has developed extensive patterns of learning which will influence him the rest of his life. The learning process includes an adequate exposure to knowledge without overstimulation, the ability to acquire knowledge, organization of this knowledge and, finally, its application to the problems of life. Anything that interferes with any of these will result in some type of school problem, usually inability to do satisfactory school work.

The home environment must be free of anxiety and fears, without any distracting influences that may prevent full application of energy to studies. Overindulgence, overprotection or lack of affection affect the child adversely. He must have reasonable freedom from any illness that prevents the full use of his mental potential. He must be matured sufficiently to approach his school problems in an adequate manner. Unfortunately, educators and pediatricians are unable to tell, with the best known tests, whether a child is matured sufficiently to begin kindergarten at four, five, six or seven years. Maturity means physiological, emotional, functional and chronological growth. Some children are capable of first grade work at one age while others must wait until a later date.

In general, the mental level of a child should determine his grade placement. In most schools, however, children are promoted on a chronological basis rather than on performance. This usually means that the school is engaged in mediocrity or average. "Average is as close to the bottom as to the top." Generally speaking, therefore, bright children are held back and dull children are pushed beyond their capacity, both of which are responsible for many problems.

The child is first exposed to knowledge in the home in the form of story reading or story telling. This can result in overstimulation if the child is expected to repeat the acquired knowledge. The learning process thus becomes drudgery and leads to rebellion on the part of the child. Perhaps it would be well if, first, a child were never taught nor "learned" anything as long as he lives and, second, if, after he has learned something, no attempt were made to find out whether or not he knows it.

Children learn from visual stimulation such as reading, pictures, diagrams and observations of nature, from auditory stimulation as in discus-

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*Presented before the Fifth Annual Potomac-Shenandoah Valley Postgraduate Institute at Martinsburg, October 23, 1960.

†From the Department of Pediatrics, Ohio State University College of Medicine, and The Children's Hospital, Columbus, Ohio.

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sions, presentation by teachers and listening to recitations by other children, and from experimentation, in which they attempt to do something new. The child by nature is desirous of doing new things and of doing old things in new ways. Many times the formalization and regimentation of school programs destroy the child's initiative. Play is the work of childhood. The child who is successful in school is the one who gains pleasure from learning because he learns easily and not as a result of prolonged drills and practice. Mental discipline does not come from performing irksome, repetitive tasks.

A six-year-old is an active, self-willed individual who is unpredictable in behavior, who wants to learn and who looks forward eagerly to school. He loves praise and willingly works to earn it. His difficulties arise in his inability to break away from the home to the expanding environment of school. The teacher becomes a symbol of the parent and the child attempts to identify himself with this new symbol. The child who is successful in his approach to school is one who is able to transfer his security from the parent and home to the teacher and school. The teacher who has a warm, outgoing nature can give the child a sense of belonging and of being accepted. The teacher who is willing to say, "I love you," occasionally to a child makes this change more easy. The child may have definite fears of the teacher, of the school organization, of the school building, of riding a crowded bus, or walking along a strange street with strange children where some fearsome experience may occur. For instance, fear of dogs may be responsible for a child's refusal to walk along a street to school. He also has a strong desire to be accepted by his peers; if, however, he is defeated in these together with the development of a host of other fears of strange things in his new environment, he may become very cautious and may retrogress in his development to a closer association and dependency on his parents and the home.

Cases and Commentary

Case 1.—Mary A. was a 7-year-old white girl in the second grade who, after Christmas vacation, had severe abdominal pain on arising in the mornings. The pain increased in severity as school time approached and ended in vomiting or refusal to go to school. The pain promptly disappeared if the child was permitted to remain at home.

Examination showed no physical cause except for some hypertonic activity, alertness and precocity in a little girl. She said that she liked school and the teacher; it was later shown, however, that she hated both but answered in this fashion because children were supposed to like school. The problem had become acute because of an unusually long Christmas vacation during which there had been much family entertainment and pleasure. In addition, there had been cessation of the urging by her parents to achieve higher grades. She suddenly felt that going back to school was a disruption of her security against which she was rebelling. Mild sedation and tranquilization together with insistence that she attend school solved the problem in approximately two weeks.

Failure to recognize the maturity of a child except on an age basis may lead to improper grade placement. It seems better to accept the intellectual rather than the chronological age in order to offer sufficient challenge for learning more and more. Lack of such challenge may lead to disinterest, to poor work and to a "lazy and uncooperative child."

Case 2.—Henry H. was a 5-year-old boy in kindergarten who was reported by the teacher to have infantile paralysis because he would support himself on his hands as he walked around the table when the children were marching to and from their duties. No type of infectious process was found. When asked why he walked in this fashion he answered, "I am bored with marching around the table." The child's intelligence quotient was 160. He had been rated as a non-conformist and an uncooperative child by the school.

Case 3.—Tommy J. was an 8-year-old boy who, late in the third grade, was threatened with failure in arithmetic because he refused to do his problems in horizontal lines on the work sheet. This did not conform to the rigid rules of the teacher and for that reason the child was to be failed even though his answers were always correct. The father of the child was engaged in research in a large industrial concern.

The teacher was advised to leave the child alone and, after a few weeks, he was satisfied to do his work in the accepted manner. He had been experimenting and had found to his own satisfaction the best way to do his work. How much damage could have been done this child by channeling his efforts and blocking his efforts to think of anything new?

Teachers and school administrators usually have too many pupils to permit individual attention, and little or no time to learn why pupils do or do not perform well. Results become the responsibility of the child in a rigid, prescribed learning program. Too often, little or no effort is made to learn why the pupil is doing poor work.

Case 4.—William R. was a 9-year-old child in the fifth grade who was threatened with failure

by the school without any explanation of why this was except that he was not doing his work. Two years before, the child had had an operation to correct strabismus; this, however, had been delayed until he had lost 70 per cent of vision in the crossed eye. The ophthalmologist had attempted to restore vision in the affected eye by covering the good eye, with the result that the child had only 30 per cent total vision. When the good eye was uncovered, he was able to do passing work. The school had made no effort to find the cause of the child's problem.

Growth Cycles

The great variation in the appearance of the growth cycles of children may cause difficulties. The ten-year-old who is as large as fifteen years is accepted as the latter and expected to perform accordingly, even when the bulk of his energy is going into physical growth without enough for his expected mental activity. These pupils, improperly recognized and excessively stimulated to do better school work and to participate more in competitive athletics, develop an inferiority complex.

Reading Disability

Reading disability occurs in approximately 16 per cent of boys and in 5 per cent to 10 per cent of girls. A diagnosis of reading disability is established when there is a wide variation between the general intelligence and the results of reading tests. Specific reading disability may be defined as the inability to read after adequate educational exposure in a child of normal intelligence. Children who can read easily, will read. The child who has difficulty in reading will not read except under pressure. Reading for pleasure occurs only in those children who can read easily. Reading disability begins to show itself as a problem at the third or fourth grade when the child begins to acquire information by visual rather than by auditory methods. He becomes so involved in the words in a problem that he loses the meaning of the text. The deficit then becomes greater each year because of the increased need for visual acquisition of knowledge. Some of these children are called lazy and uncooperative in school, when they really are rebelling against untoward difficulties or against being overstimulated throughout their entire lives.

Reading involves the eye, nerve pathways and the sight center. A refractive error of 50 per cent produces little change in the literacy of the child. "It is not the eye but the brain that learns to read." Twenty-five per cent of the children cannot learn by the flash card system although successful when taught the letter method.

Case 5.—Samuel R., a 14½-year-old boy, was the size of a 17-year-old and had been in two public and two private schools, in each of which he had done failing work but nevertheless had been passed from one grade to the next. The child had no physical defects, had an average intelligence quotient, but had the reading ability of a third grade pupil. His only problem was that he could not acquire knowledge. The boy wanted so badly to read that he would buy a book and carry it under his arm so that people would think that he could read. He was placed in a public school with the understanding that he was not to be asked to read in class. He was then given orthoptic training and extra aid in reading, with the result that in two years he had gained five or six years in reading skill. Unfortunately, however, the boy by that time was seventeen years old and of adult size. His learning capacity had not kept pace with his size. He was never able to overcome this handicap, one which should have been recognized earlier in life and corrected.

Diagnosing Reading Disability

This diagnosis of reading disability requires a careful visual examination including refraction, ability to fuse images of the two eyes, recognition of reversal of words and letters, moving the eyes from one line to another and reading speed. It is not sufficient for the ophthalmologist to say that there is no refractive error and that therefore the reading disability is due to a psychological or emotional factor. Isn't it just as likely that the emotional-psychological factor develops as a result of inability to read accurately and rapidly? Increased reading exercises will be of little value unless the cause of reading disability is found and an effort made to remove it. As well urge a child with a nail in his foot to walk more before the nail is removed. Usually, tutoring cannot be done efficiently by the parents because of the many emotional problems involved. It is unfortunate that there are school teachers and administrators who refuse to recognize specific reading disability, classifying all nonreaders either as dull or willful children.

Speech Difficulties

Speech difficulties which occur in approximately 5 per cent of children to the extent that the child is cognizant of the difficulty includes lisping, baby talk, garbled speech, stammering and stuttering. Any one of these may cause the child so much trouble that he will not attempt to recite nor read for fear of ridicule by the teacher and the other children. Some children also are afraid to try in school for fear of failing.

An Approach to Solution

Any child with a school problem merits a complete physical examination to eliminate all sources of infection and all physical difficulties;

a thorough investigation of his emotional environment also should be made. The physician should have a separate interview with the parents but not with the child's knowledge. Also, he should obtain information from the school. All preschool examinations should be thorough in order to ascertain as much as possible about the maturity of the child, his rate of growth and his ability to withstand mental and physical trauma.

Prevention of such problems is more desirable than attempting to cure them after they have developed. The school program should be geared to all levels of intellectual qualification. The gifted child should have the opportunity to advance as rapidly as possible in order to preserve his learning instinct and desire. It is on this type that the future of our nation depends for scientific advance. Many schools now are rating pupils as rapid, moderate, intermediate or slow learners. This is excellent if efforts are made to find out why a pupil is in the slow or intermediate learning group and if he is helped to advance by correcting his handicapping abnormalities.

The colleges of education include many courses concerning theory and practice of teaching various subjects but practically none having to do with the individual that is taught. There should be a course concerning the problems of growth and development and their variations. It is odd that prospective teachers are trained well in theory of instruction but not at all concerning the raw material with which they will be working. There seems to be a tendency to operate the school system for the benefit of records and for ease of administration rather than for promotion of scholarly endeavor.

Overcrowding in schools, with classes of 35 to 40, makes individual instruction impossible and can result only in regimentation by the teacher. The system of the grades, with individual teachers, has been in vogue so long that few attempts have been made to change it. While in some ways it may be well for one teacher to teach only one grade, at the same time it may be more advantageous for the child if he were to have the same teacher for the first three grades, where the greatest number of school problems occur. There certainly cannot be very much difference in the methods of teaching the first and the third grades. It must be assumed that all teachers will be good teachers. School buildings, with their extremely high cost of construction, that stand idle much of the time might be put to better use by two sessions a day or a longer school year. This would permit an opportunity to put more money into teachers with smaller classes and into better educational programs.

Health Program Within the School

The school health program within the school should utilize more physicians with training in pediatrics who would serve basically as full-time teachers. They would be responsible for health programs and their instruction within the school.

The school physician should play a key role as health specialist and counselor. He should encourage parents to have their children examined by the family physician, with suggestions concerning the type of inclusive examination desired. He should examine and screen those children who have not had private examinations, as well as those referred by the school nurse, the teacher and the school counselor. He should interpret all health findings for the parents, the school nurse and the teacher as they relate to the child's education potential, and any handicaps as may have bearing on the child's education program. He should consult with the family physician when school activities impose physical or mental burdens on the child. He is the coordinator between the private physician, the medical society, the class room teacher and the school administrator. Last but not least, he should be part of the evaluating team that decides whether a pupil is to be delayed or advanced in his education program.

The Curriculum Modified

The school curriculum should be modified to encourage potential dropouts to remain in school. There should be a flexible program to meet the special needs of gifted children in the specific developmental needs of early adolescence. The program should be broadened so that practically all children have an opportunity to excell in some particular field. This would mean less emphasis on heavy competitive athletic endeavor such as football, basketball and baseball and equal emphasis on minor physical activity and various phases of academic endeavor. Nothing succeeds like success.

The family physician, preferably a pediatrician, should play a lead role in the prevention, treatment and elimination of school problems. Newborn infants are (and should be) carefully evaluated at frequent intervals, as they progress through the early years towards school age, as to potential ability, degree and rate of maturity and ability to withstand physical and mental stress and trauma. The information gained from such evaluation, as well as the evaluation itself, is of great value to the child and the school. The physician should assume responsibility for a proper environment for emotional development during the pre-school years by careful, anticipa-

tory counseling with parents. Such experience can be most rewarding for the child as he has been supervised and evaluated and protected by his physician and guided into channels where he can make progress commensurate with his ability. As the child advances into school years the periodic examination should be made at least twice a year during the first several grades. If there are indications for more frequent examinations, they should be made. Every routine examination should include reference to school progress and in particular to reading ability.

The pediatrician's responsibility should extend from the child to the community. He should be familiar with the resources and aids that may guide the family into competent hands for correction of the various problems that beset the child. As a citizen, the physician should concern himself with the adequacy of the school system, its alertness to problems, and the availability of adequate remedial services. He should preserve the infant's driving initiative and broad horizon which make the learning process a pleasure and the school a constant challenge.

Under the Weather

WHO is under the weather? We are. Every man is under it and bathed in it. Man is the only animal who can survive in both the tropics and the poles. (Never mind bears. *Ursus maritimus*, the polar bear, is not the same species as *Ursus horribilis* which, believe it or not, is the zoologist's label for the grizzly). Every other animal—and every plant for that matter—has a climatic range and will not survive beyond it. But man lives in the arctic and lives in equatorial regions. The identical man, indeed, can jet-propel himself in a day from one zone to the other without suffering. *Homo sapiens* can laugh at weather. Or can he? Not quite.

There are, to begin with, diseases associated with the extremes of weather—like frost bite and heat stroke. Then there are the curious psychologic correlates of weather. The adjective "sultry" can describe a blond as well as a climate. Where barometric pressures are low, tempers are low. Beautiful spring days, and brisk winter days seem to make life worth living. Sunny Italy has contributed far more to human culture than Spitzbergen at 80° latitude or Biak at 0°. Charles Kingsley, in his *Ode to the Northeast Wind*, said that ". . . the hard grey weather breeds hard English men."

When our earliest ancestors were furry animals, we had insulation against the strong, bright sun with its bad as well as its good radiation. When we lost our fur, our skin became the surface that had to take all that the sun could pour down on naked man. The pearly-pink of the Caucasian became a liability, for it invited sunburn. Skin cancer is commoner among those with pale skin considerably exposed to sun. Welton has reported that in the Carolinas are a group of white-skinned farmers of northern European ancestry. Among these people, skin epitheliomata are extraordinarly common, some patients developing one every summer! Hopkins and Swank have shown that multiple sclerosis exacerbates when the weather is unstable. Rheumatic fever patients do better in Florida or Arizona than in Maine or Minnesota. The patient in a hot climate needs more water and salt and the patient in a cold area needs more fat and carbohydrates.

Few physicians pay much attention to the weather. It seems, as Mark Twain is alleged to have said (he really didn't) that everybody talks about the weather but nobody does anything about it. The doctor usually contents himself with advice about buttoning up your overcoat. The major medical student of the weather was Mills whose 21-year-old book on *Medical Climatology* is still the classic in the field. Mills accumulated impressive evidence of the effect of climate on health. He felt that the dissipation of internal heat was a major factor in the regulation of health, and this, in turn, depends on the temperature and humidity of the air around us. The problem is not only the question of absolute humidity or temperature, but also the changeability of weather.

The weather is, of course, as pervading as the air we breathe. Strange that we have so taken it for granted—so assumed our helplessness to modify it that we scarcely study its effects on human health. Wonder how it is that the old folks know that it ain't going to rain no more? The old folks are sensitive to the folk language, and the folk language talks of the weather. We could do worse ourselves.—Journal of the Medical Society of New Jersey.

Employment of the Cardiac*

David Gelfand, M. D.

During World War II and ever since, there have been unprecedented opportunities for employers to learn about the advantages of hiring physically handicapped workers. The results have been uniformly favorable, showing less absenteeism, less labor turnover, a lesser number of accidents, less work spoilage and better production from the handicapped than from the physically sound worker. The employee who has a physical impairment wants desperately to keep his job and his attitude toward the job and the employer reflects that desire. Large numbers of employers have recognized that there is truth in the slogan "Employ the Handicapped, It's Good Business."

Good Business and Manpower

Good business, however, is not the only reason for employing the handicapped, particularly those with diseases of the heart or blood vessels. There are at least eleven million persons in the United States with some form of heart or vascular disease. With the steady aging of our population, the number will increase through additions to the ranks of those whose hearts and blood vessels show the effects of the aging process. It is sound economics and good sociology to keep as many of these men and women as possible from becoming burdens to their families, their communities and themselves. Through cardiac-in-industry programs, the American Heart Association and its affiliated heart associations are working with their communities to salvage manpower for industry and to open the way to economic independence for the cardiac patient.

The CWCU: How It Works

The Cardiac Work Classification Unit in Philadelphia (supported in part by Grant RD 281, Office of Vocational Rehabilitation), under the sponsorship of the Heart Association of Southeastern Pennsylvania and the Division of Adult Cardiovascular Disease, Commonwealth of Pennsylvania, came into existence in February, 1952. The Unit consists of a cardiologist, a psychiatrist, a medical social worker and a vocational counselor. In 1953 a second unit, composed of the same disciplines but not the same persons, was established to conduct follow-up examinations exclusively.

The Author

- **David Gelfand, M. D., Assistant Professor of Cardiology, University of Pennsylvania Graduate School of Medicine, Philadelphia, Pennsylvania.**

The Unit's clinical sessions were held in the Heart Station of the Philadelphia General Hospital. The patients were interviewed individually by each member of the team. The cardiologist's examination included a detailed history, a physical examination, an electrocardiogram and an orthodiagram. The vocational counselor's interview consisted of a desk audit to analyze the patient's job history and his present duties, including skill and physical requirements of the job. The patient's attitude toward the physical, emotional, and performance requirements of his present or last job also was elicited. The medical social worker interviewed the patient and available family members to obtain information regarding any economic, personal or family problems. The social worker also noted the impact of cardiac illness on the patient's family and on his social and recreational activities. The interview by the psychiatrist elicited information on his basic personality type, outstanding defenses manifested, prevailing moods and willingness to cooperate. The psychiatrist was interested also in the patient's understanding of his illness and his reaction to convalescence.

On completion of the individual interviews, the patients were discussed in a team conference, each team member presenting pertinent material and free discussion following. The multidiscipline approach was practiced, and no recommendation was made individually before the group conference was held. Adherence to the policy of team approach enabled all members of the team to gain experience and insight into the problems of the worker with heart disease, his resulting disability and its relation to employability.

The Cardiac Work Classification Units[1-6] throughout the country have demonstrated that most persons with heart disease can work. The

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statistics of our unit are comparable to those of all operating units in the country and are not unique. It was recommended that 91.4 per cent of patients with organic heart disease or with vascular disease return to work (full time), with or without restrictions. Reappraisal showed the physical condition to be improved in 29 per cent of cases (result of cardiac surgery, recommendations for therapy), unchanged in 62 per cent and worse in 9 per cent.

In the last mentioned group, it was the judgment of the team that the natural progression of the heart disease rather than the physical exertion of the job was responsible for the deterioration in the physical state.

Despite the fact that in most instances the cardiac can be returned to his former job with few or no restrictions, based on the physical factors of heart disease, it is apparent that not all cardiacs who can work do so. Although 91.4 per cent of the cardiacs evaluated were judged to be physically able to return to work, approximately 30 per cent so judged did not follow the recommendations of the Unit. The Unit studied[7] a group of patients in an effort to determine the medical, vocational, social and psychiatric factors related to unsuccessful vocational adjustment of cardiac patients.

Successful and Unsuccessful Vocational Adjustment

The term "successful vocational adjustment" (SVA) is defined as "the return to work without aggravation of cardiac disease." If the job placement is consistent with the Unit's recommendations, then patients who return to work with or without restrictions, or to the same job with reduced activities are considered to fall into the SVA group. The patient may continue to show signs and symptoms of cardiac illness after return to work and still be classified in this group if the cardiologist judges that the heart disease is not being aggravated by the work performed but, instead, would be anticipated on the basis of the physical status even if the patient were not working.

Those revealing "unsuccessful vocational adjustment" (UVA) were defined by one or more of the following criteria:

(a) The patient is not working, although able to do so physically.

(b) The patient is not working up to the recommended level.

(c) The patient is working significantly beyond the recommended level, with aggravation of the heart disease.

The data from the team evaluation schedules revealed that the group classified as UVA differed from the group classified as SVA in that the former group showed a significantly greater frequency of problems in the social and vocational areas. The UVA group had multiple problem areas; their problems appeared to be more severe, and there was a greater tendency toward aggravation of these problems by the cardiac illness. The SVA group more often realistically accepted the illness, while the UVA group was overconcerned.

From the schedules for each discipline the following information emerged:

1. The cardiologist classified a number of the patients as III C (New York Heart Association Classification). This degree of incapacity did not necessarily render the patient UVA since a number of patients with this classification were SVA. Additionally, in the UVA group, it was judged that these patients could be gainfully employed without aggravation of the cardiac condition. It was obvious, therefore, that the reason these patients were not working was based on noncardiac factors.

2. The data obtained by the vocational counselor showed that job stability was an important factor that differentiated the two groups. The SVA group changed jobs much less often than the UVA group, both before and after the onset of heart disease. This may be related to the finding that three times as many patients in the UVA group had major problems in personal relations on the job, before cardiac illness, as in the SVA group.

3. Data from the medical social worker's schedules concerning economic and family stability factors showed that generally the SVA group experienced little or no economic deprivation, and if family stability was affected, it was likely to be in a positive direction. The UVA group suffered greater economic hardship and their families were forced to make sacrifices. In both groups, cardiac illness led to a shift in the roles assumed by family members. The SVA group gave up responsibilities for household activities, while the UVA group tended to assume such responsibilities.

4. From the psychiatrist's schedule, the data indicated that an individual with heart disease who made a poor vocational adjustment following his illness or its diagnosis was found clinically to be a passive, dependent person who appeared anxious or depressed on interview. He was less likely to give the general impression of being frank, spontaneous or friendly. His defenses typically were those of regression or projection. Following his illness he was found to have cut down his activities excessively and to have had a poor convalescent record due to

trying to get back to work too early, or to prolonging unnecessarily his return to work. On the other hand, the SVA patient made a good impression, appeared normal in mood and showed the defenses and personality characteristics of the obsessive compulsive. Following cardiac illness his convalescence was of appropriate length and he did not unduly restrict his activities.

Conclusions

In conclusion, medical progress depends not on discovery, alone, of improved methods of diagnosing and treating disease, but on dissemination and application of these methods as well. A Cardiac Work Classification Unit can and should serve as a center of education in the field of heart disease. The education of physicians is only one of the possibilities. Unless the general public is properly educated, it may be difficult to obtain acceptance of the recommendations made by the staff of the unit. Fear of heart disease is widespread and there is a popular belief that rigid limitation of physical activity must be observed by all cardiac patients. A great deal of public education must be accomplished if this unfounded belief is to be dispelled. Patients and their families, as well as employers, insurance companies and workmen's compensation boards, must be taught that physical activity does not necessarily cause or aggravate heart disease.

Group evaluation from the physical standpoint, the mental and emotional background, influenced by socio-economic factors, vocational factors, together with recommendations for treatment when needed, for training or change in jobs, if indicated, offers a superior approach to the proper placement in industry of the person with heart disease. The role of the psyche in cardiac disability is emphasized in the experience of this Unit. The Cardiac Work Classification Unit can make a valuable contribution to any community by preventing persons with heart disease from becoming needlessly unemployed.

References

1. Staff of the Work Classification Unit, Adult Cardiac Clinic, Bellevue Hospital: Occupational Analysis of 500 Cardiac Patients, Circulation 3:291, 1951.
2. Parran, T. V., et al: Results of Studies at the Work Classification Clinic of the Cleveland Area Heart Society, in Rosenbaum, F. F. & Belknap, E. L.: Work and the Heart, New York, Paul B. Hoeber, Inc., 1959 (Medical Book Department, Harper & Brothers, New York).
3. Clark, R. J.: Experience of the Cardiac Work Classification Unit in Boston, Mass., in Rosenbaum, F. F. & Belknap, E. L.,[2] op. cit.
4. Jezer, A.: Experience With Cardiacs at the Altro Workshops, in Rosenbaum & Belknap,[2] op. cit.
5. Gelfand, D.: Experience at the Cardiac Work Classification Unit of the Heart Association of Southeastern Pennsylvania, in Rosenbaum & Belknap,[2] op. cit.
6. Ibid.[5]: Cardiacs Can Work, Rhode Island M. J. 42:316, 1959.
7. Gelfand, D. et al: Factors Relating to Unsuccessful Vocational Adjustment of Cardiac Patients, J. Occupational Med. 2:61, 1960.

Athletic Injuries

HERE is a recapitulation of methods of cutting down the number of athletic injuries and diminishing the seriousness of those that occur. There must be a team of game officials, coaches and attending physicians dedicated to not only an exciting game, but even more, to a safe game. Each player is entitled to a meticulous physical examination and a complete medical history prior to being allowed to compete in any school sport program.

All players need proper conditioning prior to engaging in competition. Player substitutions should be promptly used when indicated. Moving pictures should be taken and then exhibited to highlight how accidents occur and how they may be prevented. The best available equipment should be furnished to all players, not only to the "varsity" team. Equipment and well-maintained play areas are a prerequisite to safe sports. Proper matching of competing players by size, weight and ability is an essential procedure.

The winning of the game is desirable. Winning at the expense of the students' well-being is not. A game is played for the sport, for the enjoyment of it, to develop player skills and abilities; to achieve player cooperation and coordination with one another, and it is played to win. But the serious injury of even one player in a game is too high a price to pay for any of these. Student health and safety must be our ultimate goal.—Robert G. Greene, M. D., in the Journal of the Medical Society of New Jersey.

Toxemia of Pregnancy*

James G. Sites, M. D.

ACUTE toxemia of pregnancy is the leading cause of maternal mortality in the United States today.[1] When one considers that the prime purpose of prenatal care is the prevention of toxemia, it is unbelievable that it assumes such serious proportions in obstetric practice.

A specific etiologic agent, other than the patient's pregnancy, has not been isolated. The common denominator of toxemia of pregnancy is marked vasospasm, but it is impossible to say whether this is due to a metabolic product of the placenta or a metabolic disturbance of sodium. Whatever the mechanism of the vasospasm it is necessary to recall that this is the primary basis of subsequent pathology in the toxemic patient whether it be manifest through edema, hypertension, proteinuria or convulsion.

Prevention Plays Particular Role

There is no other medical condition in which prevention plays such an important part. This must be emphasized repeatedly and its importance cannot be overstressed. Acute toxemia frequently occurs in those patients who do not receive prenatal care and, occasionally, in those who supposedly have had adequate care.

It is for this group of patients that a program of management has been established. Acute toxemia is a progressive disease from preeclampsia to eclampsia if untreated. Basically the two are the same disease, but varying in degree of severity.

In attempting to arrive at a method of treatment, it is desirable to direct one's efforts toward the triad of signs and symptoms of toxemia: (1) excessive weight gain or edema, (2) hypertension and (3) proteinuria. As each is considered the basic treatment is divided into two categories: (1) the diagnostic and (2) the active treatment of the specific entity.

Weight Gain or Edema

Diagnostic.—Weight gain or edema is the earliest sign to appear in the acute toxemia patient. It is most important to notice an abnormal weight gain during the prenatal course. If a patient gains more than 5 pounds in any one week of her pregnancy after the 22nd week, there is an 80 per cent chance of the development of acute toxemia. Thus an effort should be made to control abnormal weight gain and to notice all the signs and symptoms that lead to this.

The set of scales is the most important item in the diagnosis of excessive weight gain. Observation of the fit of the ring, fit of the shoes, and of edema of the ankles or of the abdominal wall after the fetal heart has been checked are equally important. Other diagnostic measures which lead to a better understanding of excessive weight, particularly after the patient is hospitalized, are daily weighing and the charting of intake and output.

Active.—The basic treatment of excessive weight gain is the avoiding of sodium retention. An effective treatment to control the edema of toxemia is one by which the sodium intake is decreased or the output is increased. On an outpatient basis, the patient should make daily visits to have her weight checked until this is under control. Hospital admission affords a more accurate method of control when the edema is abnormal.

A low sodium diet with high protein and high vitamin content is the first step in the treatment of these patients.

The number of diuretics has increased tremendously within the past two years. Ammonium chloride, mercurials, carbonic anhydrase inhibitors and chlorothiazide groups are the most important examples of such drugs. Whereas ammonium chloride was the drug earliest used, it probably is used less frequently now than any of the others. Organomercurials should be used with caution in the pregnant patient, particularly if there is evidence of known renal disease. Carbonic anhydrase inhibitors have a definite place in those patients who become resistant to other drugs.

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Chlorothiazide or one of its derivatives is the most widely used drug at this time. It can be given with safety both to inpatients and outpatients. The dose will vary from 0.5 Gm. to 1 Gm. per day in most cases.[2] The one precaution that must be exercised is the replacing of potassium which also is excreted with the sodium. There is also a hypotensive effect as well as a potentiation of the effect of other drugs. Most patients with early mild toxemia will have a definite decrease in edema and blood pressure without other treatment.

Purgatives have been used as means of eliminating excessive fluids and causing dehydration. Those most frequently used have been castor oil, magnesium sulfate and citrate of magnesia. Their advantages certainly are debatable and they should be used only in selected cases or upon request.

Exchange resins have been used with varying degrees of success. They should be reserved for other complications rather than used for the active treatment of the edema.

Hypertension

Diagnostic.—Hypertension is the second sign to appear in acute toxemia of pregnancy. It is easily detected by the sphygmomanometer, but its significance may be misunderstood. For years the magic numbers "140/90" have been that level at which the diagnosis of toxemia, on the basis of blood pressure readings, has been made. Of equal significance, however, is the relative rise in the blood pressure. A patient who, with normal pressure of 100/70, has a rise to 130/90 may have severe toxemia. Thus the relative rise is of more importance than the absolute level. This is particularly true in the younger patient group, in which the range of normal blood pressure is much lower than 120/80.

Another significant observation from the blood pressure is the pulse pressure.[3] A pulse pressure much greater or much less than 1/3 of the systolic pressure is highly suggestive evidence of impending danger.

Observation of the eyegrounds will reveal the early changes that occur in toxemia of pregnancy. Vasospasm is seen at its earliest. The sheen of the retina which is a manifestation of edema also is a characteristic finding. It is a valuable diagnostic sign in the differential diagnosis of acute toxemia and chronic toxemia.

Active.—With the marked advance in the diuretics, there has been a parallel advance in the hypotensive drugs. They are of limited value in the palliation of toxemia and serve their greatest purpose in the hospitalized patient.

Veratrum viride is one of the most effective and rapidly acting of the hypotensive drugs. It is of particular value in the treatment of the fulminant toxemia because its dosage can be controlled readily by the intramuscular or intravenous route.[4] In most cases, control can be brought about by starting with a 0.5-mg. dose of Cryptenamine intramuscularly and either increasing or repeating it each hour until a drop in the blood pressure to a desired level is obtained. Side-effects such as nausea and vomiting are annoying, but these usually can be controlled by decreasing the dose or giving antiemetics or barbiturates. Intravenous Cryptenamine is indicated for the patient with convulsions, not only to lower the blood pressure but to aid in controlling the convulsions.

Tachyphylaxis due to veratrum is not uncommon. The elevated blood pressure and the lowered pulse usually are corrected if the drug is discontinued, then restarted after a proper interval.

Reserpine, a derivative of the Rauwolfia drug, has been used extensively in the treatment of the acute toxemia. Its advantages are a mild hypotensive and a moderate sedative effect.[5] It will potentiate the effect of other drugs and must be used with caution. Reserpine must be given intramuscularly or intravenously if a reasonably early effect is to be obtained because given orally a week is required before maximal effect is reached. Vasomotor collapse in the mother and nasal congestion both in mother and baby occur occasionally with Reserpine. The anesthetist and the pediatrician should be made aware of the drug's prior administration, in an effort to prevent these complications or at least to recognize them if they occur.

Hydralazine hydrochloride is a drug which reduces hypertension and increases renal blood flow.[5] It may be used in combination with other drugs in pregnancy toxemia, with a dosage of 10 mg. by mouth 4 times daily or, for immediate action, given intravenously in 10-20 mg. dosage.

Barbiturates are of definite value for their sedative and mild hypotensive effects. They are particularly useful in the eclamptic for the control of convulsions. It is advisable to use barbiturates intravenously in the sickest patients so that the dosage can be controlled.

Magnesium sulfate serves both as a vasodilator and a central nervous system depressant. Its effectiveness cannot be questioned but with the other drugs which have been discussed and which are more effective, its use has decreased. The dosage is best controlled when given intravenously. When toxic symptoms such as un-

usual flushing, sweating of the upper lip, nausea, irregular pulse and loss of knee jerk appear, calcium should be immediately available to be given intravenously.

Albuminuria

Diagnostic.—Diagnostic treatment of albuminuria is directed toward a complete study of the urine. Frequently only an attempt is made to determine the absence or presence of albuminuria. It is necessary to ascertain this not only qualitatively but in many instances quantitatively. Urine cultures are necessary to rule out the possibility of pyelonephritis, alone or with acute toxemia.

Active.—The active treatment for albuminuria is a part of the treatment for the edema and hypertension. If there has been excessive protein loss, it should be corrected by the use of blood when anemia is present or by the use of albumin in marked hypoproteinemia.

Complications

By directing attention to the treatment of the triad of symptoms, toxemia usually can be controlled. Other problems, however, occasionally arise which require emergency treatment.

Cardiac complications with evidences of failure are most frequently seen in the acutely ill. These should be controlled and treated by the use of digitalis, oxygen, tourniquet and other accepted cardiac measures. A frequent complication with failure is pulmonary edema, which usually responds to the accepted methods of management.

Aspiration of vomitus is a hazard in the patient with convulsions. If this occurs it may be necessary to perform bronchoscopy, with irrigation of the bronchial tree with saturated solutions of soda bicarbonate and saline in an effort to decrease the toxic reaction of the gastric contents. Tracheostomy is indicated when a satisfactory airway cannot be maintained by other methods.

A decrease in urine output often occurs after use of the hypotensive drugs. This is due to the change in blood pressure and pulse pressure, and with continued observation is most frequently corrected within several hours. If the decreased output continues, however, one must be constantly aware of the possibility of an acute renal shutdown. Immediate measures of fluid restriction and sodium restriction must be instituted and maintained until it becomes evident that the danger no longer exists.

A particularly interesting postpartum phenomenon is the puerperal vasomotor collapse which occurs after the patient has been delivered when there has been profuse diuresis. The condition has been described by Tatum and Mule[6] as similar to the Addisonian crisis characteristic of acute adrenal insufficiency. If such should happen, immediate administration of isotonic or hypertonic sodium chloride solution intravenously is indicated, in an effort to restore vascular tone.

Obstetric Treatment

It is necessary to make an obstetric evaluation of the patient after the acute toxemia has been diagnosed and actively treated. The patient who responds to palliative therapy should be allowed to continue in her pregnancy with close observation. If the toxemia becomes severe enough for the patient to be admitted to the hospital, it seldom is advisable to discharge her before delivery.

If delivery is indicated, after control of the toxemia, it should be accomplished in the manner indicated obstetrically. Many patients with acute fulminant toxemia will proceed immediately into labor. If the toxemia of pregnancy is progressive or if it has been acute in onset, immediate delivery usually is indicated.[3] This should be accomplished with the least trauma possible both to the mother and the baby. After initial treatment, routine pelvic examination should be performed to determine the status of the cervix. Labor may be stimulated by artificial rupture of the membranes if found to be ripe. If the cervix is unfavorable oxytocin may be used for stimulation or induction of labor. The intravenous method of giving oxytocin is the most satisfactory in these patients because the dosage can be well controlled and given as indicated.

Delivery by cesarean section is indicated in those cases in which delivery by the vaginal route is contraindicated for obstetric reasons or in which the toxemia is progressing rapidly and the cervix is unfavorable for vaginal delivery. Cesarean section should be performed only after treatment has been instituted. The argument over cesarean section as a means of delivery undoubtedly will continue, but the treatment *par excellence* for acute toxemia is termination of the pregnancy with delivery of the fetus and placenta.

Summary

Acute toxemia is a unique disease entity in that it occurs in no condition other than pregnancy. The importance of prevention by adequate prenatal care is unquestioned.

The treatment of acute toxemia of pregnancy should be directed toward (1) edema, (2) hypertension and (3) proteinuria both by a diagnostic and an active therapeutic approach. Treatment of edema or excessive weight gain is

facilitated by the control of diet and the use of diuretics. The hypertension is best controlled with mild sedation and hypotensive drugs. The proteinuria deserves complete diagnostic study, in an effort to determine the cause and type, as well as protein replacement.

Obstetric treatment of toxemia should be undertaken after consideration both of the mother and fetus, after active treatment has been initiated for the disease. The treatment *par excellence* is delivery of the fetus and placenta.

When palliation has not controlled the disease, delivery is indicated. This can be accomplished by induction or cesarean section. Cesarean section should be used for those patients who have an unfavorable prognosis for vaginal delivery when the toxemia is rapidly progressing and uncontrollable.

References

1. Perinatal, Infant, Childhood and Maternal Mortality, Children's Bureau Statistical Series 50, 1958.
2. Finnerty, F. A., Jr., Buchholz, J. H. & Tuckman, J.: Evaluation of Chlorothiazide (Diuril) in the Toxemias of Pregnancy, J. A. M. A. 166:141, 1958.
3. Parks, J. & Sites, J. G.: Management of Acute Toxemia of Pregnancy, J. Michigan State M. Soc. 58:919-923, 1959.
4. Finnerty, F. A., Jr. & Fuchs, G. J.: The Veratrum Treatment of Toxemia of Pregnancy: A Controlled Study, Am. J. Obst. & Gynec. 66:830, 1953.
5. Ibid.[3]: The Value of Parenteral Reserpine in Acute Hypertension, Am. J. M. Sc. 229:379, 1955.
6. Tatum, H. J. & Mule, J. G.: Puerperal Vasomotor Collapse in Patients With Toxemia of Pregnancy: A New Concept of the Etiology and a Rational Plan of Treatment, Am. J. Obst. & Gynec. 71:492, 1956.

Changing Problems in TB Control

PROGRESS in anti-tuberculosis therapy and experience in case finding require changes in control procedure. Time tested methods remain fundamentally the same and cannot be discarded. Locating new patients and supervising the known active cases demands a changing program. Eradication of the disease is being frequently discussed in spite of the fact that new patients are being located almost daily.

Prior to modern chemotherapy, treatment of pulmonary tuberculosis depended largely on bed rest, nutrition and pneumothorax. Most patients were either in sanatoria or under the care of specialists in pulmonary diseases. The physician now specializing in tuberculosis is a rarity. The advent of streptomycin followed by PAS, isoniazid and other anti-tuberculosis drugs, so simplified treatment that patients could be managed by the family physician. This has resulted in fewer cases being referred for hospitalization, and in an increase in the number of ambulatory patients.

The unhospitalized have become a major health problem. Often, those with active lesions and positive sputa are permitted to follow their usual routine and activity. The previous difficulty of controlling the "good chronic" with lingering tuberculosis and a positive sputum, has been complicated by the group under ambulatory therapy, as an added source of infection.

Over the years there has been a gradual drop in the death rate in tuberculosis, and following the use of streptomycin, the most rapid decrease in mortality in history. Although deaths will continue to fall, eradication is still a long way off.

Newark (N. J.) in 1915 had a death rate of 195 per hundred thousand population. This rate gradually declined and in 1944 (prior to the use of streptomycin) reached 60 per hundred thousand. Then followed the rapid drop to 11.6 in 1958, the lowest in the history of the city. The same rate was maintained in 1959. This spectacular fall occurred with a disease that continues to take a greater toll of health and life than any other communicable ailment and with a destruction greater than all other communicable diseases combined. Once a problem of young adults, it now concerns the aged, especially old men.—Irving Williams, M. D., in Journal, Medical Society of New Jersey.

A Survey of Steroid Therapy in Children*

Walter E. Bundy, M. D.

It is extremely difficult to discuss the use of steroids in clinical practice. This is especially true since their application more often is empirical even though good results are obtained. The admittedly nonspecific effects of these drugs requires that sound judgment be exercised in their use. At present, there seems to be a dilemma as to indication for steroid therapy. The problem does not end here since it is only with considerable difficulty that one can keep informed regarding the various steroids being introduced to the profession by the pharmaceutical houses today. Because of the complexity of the situation, this paper is divided into two parts, namely, the office use of steroids and their use in those cases in which therapy is best performed in the hospital. It is fully realized that the indications given are debatable at times; in most cases, however, their use as listed is rather clear-cut.

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Office Use of Steroids

A general rule that we have adopted when using steroids outside the hospital might be stated as follows: To be given to patients with a disease of known etiology, where therapy is of short duration, and where there is no problem of withdrawal.

Contact Dermatitis.—We speak here particularly of Rhus dermatitis. In a survey of several dermatologists, it was estimated that steroid therapy probably would be necessary in approximately one patient in every ten. There are no set rules for its use other than the severity of the case and the location of the lesions. In general, lesions of the face with marked swelling around the eyes give a great deal of discomfort. Aristocort, Aristomin, or other similar products, have been quite satisfactory. One must not forget, however, the other measures used in this dermatitis such as wet compresses and mild sedation, which also add to the comfort of the patient. Epstein[1] has the following to say about Rhus dermatitis: "In extreme cases with great discomfort and disability systemic therapy with Corticotropin or one of the cortico-steroids is indicated. These drugs have revolutionized the treatment of allergic contact dermatitis. They suppress the inflammatory response, edema melts away; vesiculation is reduced but the disease is not cured; it must run its course and therapy must be continued until it is quiescent. This usually requires one to two weeks."

It has not been necessary to give steroids for the above mentioned length of time in our group of patients. It must be kept in mind, however, that these persons do not report to the physician until all home remedies have failed. This, in all probability, explains our shorter duration of therapy.

Aristocort or Medrol are the drugs most frequently given. A sliding scale of dosage, that is, 5 tablets are given the first day, 4 the second, 3 the third, and reduced until the patient is receiving only one tablet at the end of 5 days, has been effective in our group of patients. In the case of the very young patient and in those cases in which relief is not obtained, the dosage is adjusted accordingly. Not all patients treated are benefited; the great majority, however, are helped and, in general, the results could be classified as highly satisfactory.

Drug Reactions.—This is a rather large group and in it would be classified "hives" or other reactions to the injection or ingestion of drugs. Antihistamines should be tried first, but if the condition seems to be getting progressively worse, steroids are distinctly indicated. If there is evidence of laryngeal edema, epinephrine and steroids at times are a good combination. In drug reactions it is estimated that steroids would be necessary in 1 to 2 cases out of every 25.

Asthmatic Bronchitis.—Children with this condition are quite a problem to the practicing physician. In spite of several changes in antibiotics, these patients continue to wheeze. In children with this diagnosis, two factors seem to stand out, namely, a tendency to be more obese than the average, and a low gamma globulin in many cases. A high percentage of the group do not look sick. Aristocort has been very satisfactory

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in the cases treated. If the gamma globulin level is low, appropriate therapy is given for this condition. Children receiving steroids for asthmatic bronchitis should by all means receive antibiotics while under treatment.

Croup.—Recently steroids have been very impressive when used in infectious croup. On several occasions, patients with laryngeal stridor to the extent that tracheostomy was considered have been observed. Decadron 2.5 mg. by injection was given, with almost complete relief in two to three hours. To date, 16 patients have been treated, with excellent results. Again, it must be stressed that appropriate antimicrobial therapy is indicated. Steroids are not a cure-all and careful surveillance is needed to be sure that tracheotomy is not indicated. This treatment of croup is listed under the office use of steroids for it is felt that if seen early, hospitalization might be avoided.

Herpes Zoster.—Children with this disease apparently have minimal discomfort. For this reason, little, if any, medication is given. In adults, according to one of our dermatologists, ACTH is very effective. This is given every other day until the patient has some relief from his discomfort. As far as can be determined, we have had 5 cases of herpes zoster in children in the past two years. The children were treated on an outpatient basis. On the average, recovery was complete in twelve days. No steroids were used.

Eczema.—In selected cases, the person with eczema also can be treated on an outpatient basis. In this group, again, it must be stressed that steroids should be used when other treatments have failed. For example, during the past year two children with severe eczema have been under our care. Ointments and other methods of therapy were tried, without noticeable effect. One of the children spent 240 days in our hospital during 1959. It might be added that these were "miserable" days in which the child was restrained to prevent scratching. Other measures having failed, it was decided to give him systemic steroids. After five days of prednisone his condition had improved both mentally and physically. Some degree of dermatitis still is present, yet he is comfortable and is able to remain at home.

The second child has been symptom free for three months and steroids are needed every third day to prevent recurrence. The mother has been advised on many occasions to bring the child to the clinic at the least sign of infection.

Mumps Orchitis.—Experience with the use of steroids in this condition is somewhat limited because of the age of children under our care. Several adolescents with mumps orchitis who have been seen in the past four years have had rather dramatic relief with the use of steroids. It is our belief that in the majority of cases, the patient can undergo effective therapy at home.

Asthma.—Whether to treat these children at home or admit them to the hospital is always a controversial subject. Glaser,[2] in his series of cases, stated that one could expect relief for these patients within 6 to 72 hours, depending on the severity of the attack and the dose given. Every effort should be made to avoid regular, long-term use of steroids. Epinephrine, as a general rule, produces more prompt relief.

A number of allergists were consulted regarding the question of whether steroids should be used on an outpatient clinic basis or whether their use should be confined to the hospital. In general, the feeling was that if the case was severe enough to necessitate steroids, then other adjunctive treatment such as an atmosphere as free as possible from allergens was needed. Children with asthma must be watched also for evidence of dehydration. Hospital care provides fluids and a low allergen atmosphere. We might say that as a group approximately one patient in ten needs steroids for amelioration of symptoms. Prednisone has been used more than any other preparation at our school. Fifteen to 20 mg. every eight hours for the first twenty-four hours are used. The dose is reduced by 2.5 to 5 mg. per day until use of the drug is discontinued. In case of severe vomiting, the patient is admitted to the hospital for intravenous hydrocortisone. Again, it must be emphasized that if the child is dehydrated hospitalization is felt to be a necessity.

Hospital Use of Steroids

It would be impossible to survey all cases in which steroids have been used at the Medical College of Virginia. The discussion that follows is based on the most frequent use of steroids in our institution. The author realizes that there are many omissions.

Rheumatic Fever.—By far, the largest group treated with steroids is that of children suffering from a collagen disease. Massel[3] summarized the basis for their use with the following statement: "Since permanent cardiac damage from rheumatic fever presumably is due to repair of the inflammatory changes, it seems reasonable to believe that the need for repair and hence the development of permanent cardiac damage can be prevented or lessened if the inflammatory process in the heart can be suppressed early in the attack, and can best be suppressed for the duration of the episode."

During the past ten years, 178 cases of rheumatic fever have been treated. In 84 cases, the patients have undergone steroid therapy in the past four years. Beneficial results have shown great improvement, with increased knowledge as to dosage. McCue[4] has adequately summarized our results.

From 1950 to 1953, 24 patients were treated with a dosage of 150 mg. per day for three weeks. Of this number, 55 per cent had been sick for over forty-two days, and 50 per cent had pericarditis or failure when the drug was started. At the end of treatment, 57 per cent were better or had no heart disease; 33 per cent were unimproved, or worse; 20 per cent had expired.

The second group, including 1954 and a part of 1955, consisted of 45 patients. The dosage was 200 mg. for the first 14 days and tapered over a 61-day period. This program was started on all patients admitted who had a definite diagnosis of rheumatic fever of less than 42 days' duration with or without heart involvement. It was used also in cases of long standing if the patient appeared critically ill. The mortality rate for this group was 6.6 per cent. In 2 cases there was further progression of murmur when the drug was started after more than 28 days of illness. Sixteen patients were without heart disease, and only three were without it at the onset.

In a third group, the patients were treated with 300 mg. daily. Although the series was small, consisting of only 8 cases, 75 per cent had no residual heart damage.

During the past five years the dosage of 300 mg. has been given. The criteria for its use has been an acute episode of rheumatic fever of less than 17 days' duration. We do not have an accurate tabulation of results but in our group of approximately 84 cases it probably would be safe to say that 70 per cent to 75 per cent are free of murmurs and the mortality rate has been definitely reduced. Based on a group of cases treated prior to steroids, one could assume that residual heart damage has been cut in half by the use of these drugs. For example, in a series of 132 cases followed at the Medical College of Virginia prior to 1948, there were only 23 in which the patient was free of heart disease at the end of three years.

Lye Ingestion.—With the advent of the steroids the whole course of lye burns has changed. Prior to their introduction to the profession, one could expect a long course of therapy in which it was necessary to dilate strictures of the esophagus that developed.

Ray and Morgan,[5] in 1956, reported our results in 13 cases in which no treatment except steroids was necessary. There now are 19 cases in our group without evidence of stricture. Therapy should be started on the patient's admission to the hospital and continued for 14 to 21 days. It is wise to pass a string in case failure results and dilation is necessary. Thus far with us the measure has been precautionary.

Snake Bite.—In the past five years, 27 persons have been admitted to the hospital for treatment of poisonous snake bite. The admissions include both adults and children. No deaths have been reported. Antivenom was given in 14 cases. In the remaining 13, the space of time between the moment of bite and that of admission to the emergency room precluded the possibility of benefit from its administration. Cortisone was used in 23 cases. The copperhead snake was cited in all but one instance; in the latter the water moccasin was blamed. In most cases, apparently, the bite had been inflicted at dawn or at dusk. Clinically, there was severe swelling of the extremity, with pain. From a review of the case records, cortisone seemed to decrease the discomfort, pain and toxicity. No effect on swelling was noted nor was there any shortening of the time spent in the hospital.

Stevens-Johnson Syndrome.—Fourteen cases of this syndrome or disease have been treated by the Pediatric Department in three years. Treatment in 13 cases has been given by the Medical Service. There have been no deaths in the pediatrics group; in the medical group, there have been 4. In many cases those adults treated were in a terminal stage, with perforated ulcers, diabetes and cerebral hemorrhage. Swain and Baile[6] recently reported 2 cases in which death occurred, in both of which cortisone was used. These fatalities resulted from septicemia.

We would be the first to agree that steroids should not be given in a routine, uncomplicated case; most of our cases, however, were referred because of extreme toxicity. In two cases, the patient was under 1 year of age, which is significant because the mortality rate is extremely high in the very young. We repeat, good clinical judgment should be exercised when cortisone is prescribed.

Adrenal Hyperplasia.—The disorder is caused by an inborn defect of biosynthesis of certain steroids of the adrenal cortex, the primary disturbance is an inability to synthesize hydrocortisone from its precursor 17 hydroxyprogesterone owing to a deficiency of the enzyme 21 hydroxylase. This substance accumulates, is metabolized, and excreted in the urine as pregnanediol. The deficiency of hydrocortisone, a potent inhibitor of pituitary activity, results in increased secretion of corticotropin which, in

turn, leads to adrenocortical hyperplasia and overproduction of adrenal androgen and other intermediary metabolites. As can be noted from this statement, borrowed from a standard textbook on pediatrics,[7] cortisone would be considered replacement therapy when this condition exists. Prior to the discovery of the steroids, there was very little to offer these patients; now they can look to the future with reasonable hope. The intent of this paper is not to deal with diagnosis and management but, rather, with tabulated results.

Treatment has been given in 10 cases of adrenal hyperplasia. Death occurred in one case. In 2 cases, the patient moved from the city and from written reports both are in good health. In the remaining 7 cases, the patients are being followed in the endocrine clinic. All 7 would be classified as doing extremely well.

Idiopathic Hypoglycemia of McQuarrie.—One case has been treated and because of its interest a short case history is given.

A 21-month-old male, the child of a medical student, was admitted to the hospital with a history of coma at intervals preceded by tachycardia, sweating and other signs of hypoglycemia. The attacks usually occurred approximately four hours postprandial and were diminished by a high protein diet. On prolonged fast the sugar, on one occasion, dropped as low as 29. The EEG was interpreted as showing a grossly abnormal pattern. Seven ketosteroids and other studies were within normal limits. ACTH gel in a dose of 25 units was given. The blood sugar jumped to 220. The dose was reduced until the blood sugar could be maintained at normal level with 5 to 10 units every third day. After four months the ACTH was stopped. The child has had no medication for six years. The blood sugar is normal. The EEG returned to normal, and the child is considered an exceptional student.

We feel certain that if this patient had not received ACTH, epilepsy of a permanent nature would have developed.

Tuberculosis.—According to E. L. Kendig of our Child's Chest Clinic, about 20 cases of acid fast infection have been treated with steroids. Pleural effusion, miliary tuberculosis with marked dyspnea, and meningitis are included. While the author has had very little experience in the use of drugs in tuberculosis, the clinicians who care for children with acid fast infections are quite satisfied, as previously stated, with results when using steroids.

Thus far, we have reported those cases in which the use of cortisone or its derivative would be classified as giving excellent results. In the next group are those cases in which steroids may be of definite value but in which, at times, the results of their use are open to question.

Nephrosis.—The clinical syndrome of nephrosis is familiar to all clinicians. Albuminuria, edema, increase in cholesterol and normal blood pressure are the usual findings. The edema usually brings the patient to the physician, and it is the most troublesome to control. Steroid therapy is the treatment of choice at present, with the results being quite variable.

Reily[9] makes the following interesting comment: "A collective, as yet unpublished, study of survival of children with nephrosis shows that in a group with onset of the disease before the ready availability of adrenocortical active hormones, 60 per cent were alive four years after onset. In a more recent group, 75 per cent survived a similar time interval." Daeschner[10] and his co-workers studied the cases of 46 patients with nephrosis and found much more satisfactory results of treatment if the signs and symptoms were under four months' duration. West[11] has tried combined therapy consisting of mechlorethamine 4 mg./kg. given in four doses, after a course of steroids. Although no results are available, it is his opinion that remission may be longer with combined treatment than with adrenocortical drugs alone.

During the past five years, 35 persons with nephrosis have been admitted to our hospital. Diuresis has been accomplished in approximately 65 per cent to 70 per cent of cases. There were 4 deaths, a mortality rate of 11 per cent. The per cent of cases in which cure was effected in this group cannot be determined since in some cases the patient had the disease prior to the advent of steroid therapy and these would be classed as chronic. The great mystery that remains is why some persons respond and others do not. Probably the degree of insult to the kidney varies, and this factor is one that cannot be determined clinically. With greater use of kidney biopsy and the electron microscope many of these questions, in all probability, will be answered.

Meningococcemia.—The use of adrenocortical therapy is open to debate at the present time. There are those who, like Bongiovanni,[12] are of the opinion that it is of little value. Thirty-five cases of meningococcemia have been treated with sulfa, penicillin and steroids. It has been our opinion that it might knock down on toxicity and that the blood pressure is more stable. Inasmuch as 31 of the 35 patients survived and two were practically dead on admission, it is felt that such therapy certainly does no harm.

Rheumatoid Arthritis.—It was quite a surprise to find that between 1953 and 1960 only 10 children in the pediatric age group were admitted with the diagnosis of rheumatoid arthritis. Four of the 10 received steroids. In general, the therapy was used for the relief of pain when other measures failed. The results could be classified as good. In one case, the child required a small maintenance dose when discharged because of recurrence of pain when the drug was discontinued. Duration of therapy varied between three weeks and two and one-half months.

Measles Encephalitis.—Enthusiastic support for the use of steroid therapy in measles encephalitis has been reported by many centers. Allen[13] describes its use in 10 cases, with hydrocortisone hemisuccinate 100 mg. given intravenously during the first twenty-four hours. After the initial dose, cortisone acetate 300 mg. was given the second day, 150 mg. the third day, and 75 mg. the fourth and fifth days. ACTH also was given, 40 units the first and second days, and 20 units the third and fourth days. He reports excellent results.

A survey of 18 cases admitted to the Medical College of Virginia Hospital in the past five years does not furnish conclusive evidence as to the therapy's value. In some of these cases, there seems to be rather dramatic response to steroid treatment yet one cannot help but wonder if the patient would not have done as well without it. For example, in a review of cases admitted prior to its use, it was noted that many patients seemed to recover spontaneously. The stay in the hospital ranged from 4 days to 3½ months. In many cases, the child was not considered normal after 3 months and in some of these cases cortisone had been used for as long as 30 to 40 days. In 6 cases, the patient had salicylate intoxication on admission. In 5 cases, thrush developed. Symptoms of encephalitis developed usually between the 4th and 6th days. No change was noted in the EEG after steroids in those cases in which the tracing was made. Here again the good results might be associated with early institution of therapy. From this small group of cases, statistically speaking, we cannot see any truly effective results; we shall continue the use of steroids, however, until they are definitely proven to be contraindicated.

In the third group of cases are those in which corticosteroids have proven to be of no value.

Schlerema.—Since there has been no therapy known to be of value in the treatment of schlerema, we have tried steroids in 7 cases.

In schlerema, the clinical picture consists of a brawny induration of the skin. The exact etiology is unknown but the disease possibly might be due to severe anoxia. It is extremely prevalent among prematures, and in this group all were under 4 lbs. in weight. The 100 per cent mortality rate could be explained on the basis of more than one factor, i. e., prematurity and the patient's uniformly poor condition prior to the institution of therapy.

Letterer-Siwe disease.—In 4 cases, the patient has received steroids without noticeable effect except possibly prolongation of life. Again it must be admitted that the steroids were used because of lack of other specific therapy.

Leukemia.—Within the last year 24 cases of leukemia have been treated with steroids and the usual drugs used in this grave condition. These were extremely fulminating cases and only two of the patients are alive at the present time.

Complications

Many articles about the complications of steroid therapy have been published. Probably one of the most comprehensive reviews is that of Good[14] who noted 33 side-reactions in 340 cases, an average of 10 per cent.

Serious intercurrent infection followed by central nervous system reaction was the most common complication noted. Gastrointestinal manifestation with ulceration and peritonitis was reported by Beck.[15] Thompson and Kelly,[16] in a series of 70 cases (adults), report side-reactions in 39 on long-time therapy. The most common in their group was peptic ulceration.

A survey of the cases reviewed in this report shows that the most common complication has been the obesity and striae with a "Cushing-like" picture. This was followed by euphoria but not enough to stop therapy. In 2 cases, septicemia developed, and in one of these the patient had a brain abscess which was drained, with complete recovery. In general, the side-reactions were less than those reported by Good and others. This possibly may be explained on the basis of lower dosage for a shorter period of time in our group.

The rule to remember in using adrenocortical drugs is: Good clinical judgment must be exercised; duration of therapy must be as brief as possible; antibiotics, in most cases, should be adjunctive therapy.

Summary

A survey as to the use of steroids in clinical practice is made. An arbitrary division into office and hospital indications is presented. Complications are discussed.

References

1. Epstein, W. V.: Rhus Dermatitis, Pediat. Clin. North America 6:843, 1959.
2. Glasser, V.: Asthma. Management of the Acute Attack and Chronic Disease, Pediat. Clin. North America 3:293, 1957.
3. Massel, B. F.: Management of Rheumatic Fever, Pediat. Clin. North America (Nov.) 1958, pp. 1143-48.
4. McCne, C. M.: Steroid Therapy for Rheumatic Fever, J. Pediat. 51:255, 1957.
5. Ray, E. S. & Morgan, D. M.: Cortisone Therapy for Lye Burns of the Esophagus, J. Pediat. 49:394, 1956.
6. Swain & Baile: Stevens-Johnson Syndrome: Need for Critical Evaluation before Initiating Steroid Therapy, Minnesota Med. 41:479-484 (July) 1958.
7. Nelson, W. E.: Pediatrics, Philadelphia, W. B. Saunders Company, 1959.
8. McQuarrie, I.: Idiopathic Spontaneously Occurring Hypoglycemia in Infants, Am. J. Dis. Child. 87:399, 1954.
9. Reily, C. M.: Yearbook of Pediatrics, Year Book Publishers, 1958-59, p. 308.
10. Daeschner, W., Dodge, W. F. & Hill, L. L.: Management of the Nephritic Syndrome with Particular Reference to Use of Triamcinalone, J. Pediat. 56:48, 1960.
11. West, C. D.: Use of Combined Hormone and Mechlorethamine Therapy in Lipoid Nephrosis, Am. J. Dis. Child. 95:498, 1958.
12. Bongiovanni, A. M., Mellman, W. J. & Eberlein, W. R.: The Proper Use of Adrenal Hormonal Drugs in Pediatric Practice, J. Pediat. 53:3-18, 1958.
13. Allen, J. E.: Treatment of Measles Encephalitis With Adrenal Steroids, Pediatrics 20:87, 1957.
14. Good, R. A., Vermier, R. L. & Smith, R. T.: Serious Untoward Reactions to Therapy With Cortisone and Adrenocorticotropin in Pediatric Practice, Pediatrics 19:91-118, 1957.
15. Beck, J. C., Brown, J. S., Johnson, J. G., Kennedy, B. J. & Mackenzie, D. N.: Occurrence of Peritonitis During ACTH Administration, Canad. M. A. J. 62:423, 1950.
16. Thompson, W. T. & Kelly, J. J., III: Hazards of Adrenal Cortical Therapy, Virginia M. Monthly (Feb.) 1960, pp. 80-84.

What Is Aging?

In the light of fundamental concepts, we are now ready to define aging from a medical standpoint as the effect of time on protoplasm which prepares the individual cell in a proper environment for the next cell division.

All the present so-called stigmata of senescence and senility are the result of the impact of environment on the individual and can be altered by training, preparation, education and motivation.

A great deal of discussion centered around what name should be given to the group in which we are interested. Although the term "oldster" has been used rather frequently, I could not find this form at all in *Webster's New International Dictionary.* The term "the aging" would probably apply to those who are becoming old or growing old or showing marks of age, according to the definition of aging already outlined. The term "aged" is defined as "That has grown old," which seems to indicate that the process is finished, when in reality we are talking about a group of people who are still continuing to live.

"Age," "old," "elderly" come into comparison as referring to persons. "Old" applies to one who is far advanced in years, "A man old, wrinkled, faded, withered" (Shakespeare). "Aged" implies extreme old age, as the "aged creature came shuffling along with ivory-headed wand" (Keats). One is elderly who has passed the prime of life. None of these last three terms seem to be applicable to the group of people which we are concerned.

The terms "senior" or "senior citizen" both have something to recommend them. The term "senior" besides indicating advanced age, carries with it the connotation of being advanced in accomplishments, dignity, rank, and office as well. It should be the responsibility of the group we are interested in to possess these attributes and to be a source of knowledge, judgment and equanimity for the community. Adding the word "citizen" to the title emphasizes that the senior is still a member of a free community, and in return for his loyalty and allegiance is accorded protection of life, liberty, and property, as well as the right to vote and speak regarding the affairs of government.—Frederick C. Swartz, M. D., in Industrial Medicine and Surgery.

Special Article

The 100th Anniversary of Local Anesthesia (A Summary of the First Fifty Years)

Eldon B. Tucker, Jr., M. D.,

The first local anesthetic agent, as all of us know, was cocaine. Although the ophthalmologist, Koller, of Germany, later of New York, generally was credited with the introduction of local anesthesia for use in surgery when, in 1884, before the Ophthalmology Congress at Heidelberg, a friend presented for him a paper dealing with the anesthetic property of cocaine (and gave an actual demonstration), we must turn to earlier years for significant details regarding the advent of cocaine and its application to the field of local anesthesia.

Render Unto Caesar

The great Sigmund Freud barely missed sharing the recognition accorded Koller and, for that matter, might very well have received full recognition himself. Freud, interested primarily in the excitatory property of cocaine although well aware of its numbing effect, introduced it to Koller, a fellow student on the lookout for an agent that would numb the cornea, and the two became partners in studying the drug. Koller actually used cocaine on the cornea, and during the brief interlude of a visit by Freud to his fiancee, lost no time in presenting a paper on the subject with not so much as a credit line to Freud.[1]

Various other observers previously had published papers on the numbing effect of cocaine but their reports had been ignored. We are indebted to Von Anrep[2] for cocaine in its first application to the field of general surgery. Von Anrep originally had injected the drug into his own tissues, with a resulting 35-minute period of anesthesia. Bennett,[3] in 1874, also had demonstrated the anesthetic property of cocaine. Mayz,[4] a Peruvian Army surgeon, suggested in the literature, in 1868, the use of cocaine in surgery. The most significant of the early papers on cocaine, however, was the one published in 1860, by Niemann,[5] who first isolated the active principle from the crude coca leaf, named it cocaine, and mentioned its numbing effect. His work, which was followed by increased experimentation on the part of others, is looked upon as the base of reckoning by which the year 1960 is designated as the one-hundredth anniversary of local anesthesia.

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Coca Leaves

In primitive South America the coca leaf has been used for ages as a local type of anesthetic. Its source is a small tree (Erythroxylon coca) that grows wild in Peru, Bolivia, Brazil and Ecuador, and that is cultivated in Ceylon and Java. The sun-dried leaf, which contains the active principle, breaks down rapidly and gives off an agreeable fragrance like tea.[6]

The Story of Cocaine

The story of cocaine is more closely entwined with the story of Peru than with that of any other country. The ancient, wonderful civilization of the Peruvian Incas was almost totally destroyed by the savage Spanish conquistador, Francisco Pizarro. No complete codex remained; the gold antiques landed in melting pots. Also destroyed were an aqueduct 500 miles long, magnificent masonry and tapestries, huacos (water jars depicting obstetric, pathologic and surgical scenes), human images in clay, trephined skulls, mummies, and the like. Fortunately, however, the little coca trees survived.

Visitors of early days told remarkable stories of the coca tree. The natives called it "The Divine Plant of the Incas" and used it as an offering to the sun. The supreme title held by the queen of the Incas was "Mama Coca." When an Indian chief was ennobled, he received from the king the two most precious gifts Incans could possess, women and coca. With a few leaves of coca mixed with ashes in his mouth, the Incan

could forego food and sleep, forget sorrows, and perform incredible feats. A surgeon performing a trephination or other type of operation would chew a cud of coca leaves, and with each resurgence of the patient's pain, would deposit saliva onto the surgical wound.

Medical observers ignored reports also by Thomas Sydenham, "the English Hippocrates," who recommended coca for malaria, Abraham Cowley, the poet, who praised it in Latin verse, and Lamarck, who classified the tree botanically, to mention a few.

A Naturalist Plays a Role

Doctor Scherzer, Austrian naturalist who accompanied an expedition to South America on the Austrian frigate, Novara, brought home, about 1858, specimens of coca leaves from Peru.

Albert Niemann

(From a copperplate print at the Bibliotheque Nationale de Paris).

He sent them to Professor F. Wohler, a noted chemist of the University of Gottingen, for examination. Wohler entrusted the leaves to his assistant, student Albert Niemann who, at the time, happened to be in need of a subject for his graduation thesis to obtain a degree in pharmacy. Niemann, after a great deal of experimenting, arrived at the solution. He exhausted the leaves with acidulated alcohol, treated the tincture with milk of lime, then filtered it. He added acid to the filtrate and distilled off the alcohol. Now he had a syrupy mass from which he extracted the resin and the water. The residue was precipitated with sodium carbonate and the deposit subjected to vigorous shaking with ether. Niemann then allowed the ethereal solution to evaporate. The ether disappeared in space; the crystals remained. Niemann knew that he had isolated coca's active principle which, from the parent tree, he called cocaine (1860). He declared that it "benumbs the nerves of the tongue, depriving it of feeling and taste.[7]"

Efforts to obtain biographic data concerning Niemann were unrewarding until the receipt of a communication furnishing those few that Helmut Guttich, presently (1960) a medical student at the University of Gottingen, was able to uncover on reference to the University Archives.

The Man Niemann

Albert Niemann, son of a school principal, was born May 20, 1834, in Goslar, Germany, a thriving city of 40,000 in 1950.

In 1852, at the age of 18, Niemann enrolled at the University of Gottingen, 35 miles distant, for two semesters (summer 1852, winter 1852-53). He lived, and probably worked part-time, in the pharmacy of a Doctor Jordan at Markt 92. His matriculation number was 67. He studied chemistry under Professor Wohler, also pharmacy, medicine and botany.

In 1853, Albert quit school temporarily, probably to earn more money; he worked for a time in a pharmacy at Linden, near Hanover and, later, in Hanover for a druggist named Hildebrandt. In 1858, he returned to Gottingen for further study. He lived first in one of the old houses on the Kurzestrasse, occupying a room in an apartment of a Mr. Clause. Later he lived on the Kurzengeismarstrasse, his landlord being a Mr. Albrecht. He remained in Gottingen after his graduation.

The subjects Niemann studied during the second term included mineralogy, botany, pharmacology and practical chemistry. On completing the second term he took an examination in pharmaceutics, at Hanover. He then studied physics, geology, botany (two courses) and organic chemistry. His course in practical chemistry under Wohler, however, was the course of most importance to us since it was during this period that he did his work on cocaine. Niemann's dissertation was published in 1860, in Gottingen, by Huth.[5] It soon was published also in the journal Wittsteins V. Schrift, Vol. 9, and was translated into English and published in The American Journal of Pharmacy the following year, through the efforts of Professor John W. Maisch of Philadelphia.

What became of Albert Niemann after his school days? We do not know precisely. His portrait comes to us from a copper-plate print now in the Bibliotheque Nationale de Paris.[9] An article published in Leipzig, in 1876, by an A. Niemann, of Gottingen, possibly was by our Albert.[10] Professor Brockman, of today's Wohler Institute, believes, however, that our Albert died within a short time after his graduation. Brockman has a couple of old papers which indicate that Niemann probably was in poor health. In one, Wohler refers to the necessity of transferring Niemann's work, apparently prematurely, to another student. In the other, there is reference to the compliance with a request by Niemann that he be excused from taking an examination on March 31, 1860.[11] Whatever his fate, our story of Niemann, like our knowledge of him, ends here.

Further Advances in Local Anesthesia

In 1885, there were several advances in the field of local anesthesia. Merck[12] completed the synthesis of cocaine through tropine and ecgonine. Halsted[13] successfully developed nerve block and infiltration anesthesia with cocaine solutions. Corning,[14, 15, 16] in attempting spinal anesthesia, inadvertently accomplished the first successful peridural anesthetic. Corning's textbook on local anesthesia was published this same year and, in 1887, he carried out further experiments with regional anesthesia, with significant results. Geisel,[17] in 1891, isolated tropacocaine from a Javanese plant resembling coca, which brought about an understanding of the chemistry of cocaine and the part of the molecule essential for local anesthesia, an important step in obtaining a local anesthetic agent free of the addiction danger of cocaine.

With Schleich's[18] notable demonstration of infiltration anesthesia in 1892 and Corning's introduction of cocaine directly into the medullary canal two years later, progress in local anesthesia continued.[19]

Practically on the heel's of Abel's[20] discovery of epinephrine, in 1897, Braun advocated its addition to cocaine to decrease the rate of absorption and increase the length of duration of anesthesia.[21] The following year, Bier,[22] of Greifswald, Germany, introduced a weak solution of cocaine into the subarachnoid space between the 3rd and 4th lumbar vertebrae without puncturing the spinal cord, thereby accomplishing the first successful use of spinal anesthesia clinically. Bier, in his experimental work, had tried the method on animals, then on himself and his assistant, Hildebrandt.

The year 1899 witnessed the further development, by Tuffier,[23] of successful spinal anesthesia, also its first use in the United States, by Tait and Caglieri,[24] and the first account of its use in surgical operations in the United States, by Matas.[25]

With the dawn of the 20th century came the discovery, in 1901, by Cathelin and Sicard,[26] independently, that epidural cocaine could be introduced by the caudal route. The years 1903 and 1904 gave us, respectively, stovaine, an agent much less toxic than cocaine, which Fourneau[27] introduced, and procaine (novocain), discovered by Einhorn,[28] a chemist, of Munich.

Braun,[29] in 1905, reviewed the relative merits of stovaine, alyphen and novocain, and established general clinical uses with regard to these new drugs. Braun's textbook on local anesthesia standardized procedures and stimulated wide clinical use of local anesthetic agents, with Payr's[30] accomplishment of suprapubic prostatectomy under infiltration anesthesia, reported in 1907, serving as an excellent example of the latter.

The Anniversary and the Reason

The one-hundredth anniversary of local anesthesia is marked by the year 1960 to commemorate a notable event in the history of Medicine.

It was one hundred years prior to 1960 that Albert Niemann, then a 26-year-old student at the University of Gottingen, isolated the active principle of coca, named it cocaine, placed some of its crystals on his tongue ("it benumbs the . . . tongue . . ."), and local anesthesia was born.

A Half-Century Ends

The first half-century of local anesthesia saw the steady, though perhaps at times deliberate, advance of its technique of use from, let us say, the simple "taste method" of Niemann to those scientifically devised, applied techniques so well established at the time (1909) it was drawing to a close. And Bier[31] it was who helped round off the fifty-year period in good form by introducing that same year his method of local anesthesia by intravenous injection of procaine.

Commentary

So it was with local anesthesia's first fifty years. So it continues with the whole of Medicine's armamentarium, equipped and maintained through the process of constant change: of the second best for the best, of the old for the new; the process of acquire-and-discard, of discovery, of movement, always movement . . . of advance.

References

1. Koller, K.: Ueber die Verwendung des Cocain zur Anasthesierung am Auge, Wein. Med. Wchnschr. 34:1276-78, 1309-11, 1884; Idem.: Klin. Monatsbl. f. Augenh. 22:60-63, 1884; Feigenbaum, A.: Freud and the Discovery of the Anaesthetic Properties of Cocaine, Acta med. Oriental.; Israel M. J. (June-July) 1956, Jerusalem, pp. 201-205.
2. Von Anrep, V. K.: Ueber die physiologische Wirkung des Cocain, Arch. f. d. ges. Physiol. 21, 1880; J. de med., chir. et pharmacol. 19, Brussels, 1880.
3. Bennett, A.: An Experimental Inquiry into the Physiological Action of Theine, Quaranine, Cocaine and Theobromine, Edinburgh M. J. 19, 1873; Idem.: The Physiological Action of Coca, Brit. M. J. 1, 1874.
4. Mayz, M.: Recherches chimique et physiologique sur l'erythroxylon coca du Perou et la cocaine, Paris, Louis Leclerc, 1868. (The monograph is in the Surgeon General's Library, Washington, D. C.)
5. Niemann, A.: Ueber eine neue organische Base in den Cocablattern. Inaugural dissertation, Vier. Jhrschr. fur practische Pharmacie, Gottingen, E. A. Huth, 1860, pp. 52.
6. Piersol, G. M. & Bortz, E. J.: Cocaine, The Cyclopedia of M., S. & P. 4:302, Philadelphia, F. A. Davis & Co., 1944.
7. Robinson, V.: Victory Over Pain, New York, Henry Schuman Pub. Co., 1946.
8. Guttich, H.: Personal communication to the author, March 9, 1960, Gottingen.
9. Mortimer, W. G.: Peru, History of Coca, "The Divine Plant" of the Incas, New York, J. H. Vail & Co., 1901, pp. 576.
10. Niemann, A.: Beitrage zur Lehre von der Cystinuric beim Menschen (Gottingen), Leipzig, J. B. Hirschfield, 1876, pp. 32. (Publication listed in Index Catalog of Surgeon General's Library, Washington, D. C., Vol. 9, 1st Series, 1888, p. 937.
11. Ibid. (9).
12. Findlay, A.: One Hundred Years of Chemistry, London, G. Duckworth & Co., Ltd., ed. 2, 1948, p. 171.
13. Halsted, W. S.: Practical Comments on the Use and Abuse of Cocaine, New York State J. Med. 42:294-95 (Sept. 12) 1885; Idem.: ....., Baltimore, Johns Hopkins Press, 1930, pp. 259.
14. Corning, J. L.: Spinal Anaesthesia and Local Medication of the Cord, New York State J. Med. 42:483-85 (Oct. 31) 1885.
15. Idem.: Local Anaesthesia in General Medicine and Surgery, New York, D. Appleton & Co., 1885, pp. 103.
16. Idem.: A Further Contribution on Local Medication of the Spinal Cord, M. Rec. 33:291-93 (March 17) 1888.
17. Giesel, F.: Benzollpseudotropein (tropacocaine), Pharm. Ztg. 36:419 (July 4) 1891.
18. Schleich, C. L.: Infiltrationsanasthesie, Verhandl. d. deutsche. Gesellsch. f. Chir. 21:121-27 (4 Sitzurgstag 11 Juni) 1892.
19. Marcos: Historie de l'Anesthesie, Anesth. et Analg. 5:112-138 (Feb.) 1939.
20. Abel, J. J. & Crawford, C. C.: On the Blood Pressure Raising Constituent of the Suprarenal Capsule, Bull. Johns Hopkins Hosp. 8:151-57 (July) 1897.
21. Leake, C. D.: Letheon, The Cadenced Story of Anesthesia, Austin, Texas, U. Texas Press, 1947.
22. Bier, A.: Versuche uber Cocainisirung des Ruckenmarkes, Deutsche Ztschr. f. Chir. 51:361-69 (April) 1899.
23. Tuffier, T.: Analgesie chirurgicale par l'injection sousarachnoidienne lombaire de cocaine, Compt. rend. Soc. de biol. 51:882-84, 1899.
24. Tait, D. & Caglieri, G.: Experimental and Clinical Notes on the Subarachnoid Space, J. A. M. A. 35: 6-10 (July 7) 1900.
25. Matas, R.: Report of Successful Spinal Anesthesia, J. A. M. A. 33:1659 (Dec. 30) 1899.
26. Cathelin, M. F.: Une Nouvelle Voie d'Injection Rachidienne, Compt. rend. Soc. de biol. 53:452-53 (April 27) 1901; Sicard, M. A.: Les Injections Medicamenteuses Extra-durales, Compt. rend. Soc. de biol. 53:396-398 (April 20) 1901.
27. Fourneau, E.: Sur Quelques Aminoalcools a Fonction Alcoolique Tertiare du Type, Compt. rend. Acad. d. Sc. 138:766-68, 1904.
28. Leake, C. D.: Ibid.[21]
29. Braun, H.: ..... Deutsche med. Wchnschr. 31:1667-71, 1905.
30. Leake, C. D.: Ibid.[21]
31. Leake, C. D.: Ibid.[21]

Graduate Medical Training

GRADUATE training courses are of vital importance to a medical school. Graduate students by their presence and their work in the basic science and clinical departments, by their research activities and by their participation in the teaching of undergraduate students, make a worth-while contribution to the medical school.

Many obstacles, including the traditional resistance of individual departments have to be overcome in the initial organization of a graduate training program. In many ways these obstacles are similar to the virgin forest which confronts early pioneers. Trees have to be felled and stumps uprooted before the ground can be cultivated. The ground has to be cleared, tilled and sown. Then follows the harvest. All this can be accomplished, and can only be accomplished, by using to the fullest extent all the potentialities of the faculty of medicine and its affiliated hospitals—M. R. Marshall, M. D., in the Journal of the Canadian Medical Association.

94TH ANNUAL MEETING

of the

West Virginia State Medical Association

The Greenbrier

AUGUST 24-26, 1961

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The President's Page

Pity the Poor Taxpayer

It was a wonderful experience to visit many of you in your county society meetings during the past two months. We hereby apologize to all for the weather we brought to your regions—the three inches of snow in Bluefield, the tornado in Wheeling and even to the Cincinnati Reds for the weather we took to the annual meeting of the Ohio State Medical Association in that city. May we add that not only the weather but the Press has been a little rough for us this spring. But we were always taught that standing up for one's honest convictions is the only thing to do.

Literally hundreds of laymen have thanked us for the stand we have taken. These represent the taxpayers who would have to pay for the medical care plan for the aged should it come under Social Security. The man who has to pay to have his children's teeth straightened, the inoculations they have to have, to pay for their own care and that of parents who may not have reached 65—he is the man whose future is in jeopardy.

And who is to speak for him? It would seem that only the AMA is opposed to this legislation. But isn't the average, middle-aged taxpayer the one who has the most at stake? He has to care for himself and his wife, those under 18, disabled under 65, and then the unnecessary burden of all those citizens over 65 who have paid Social Security under the lowest rate we shall ever know. It has been stated by one of the high officials in the Department of Health, Education and Welfare that he envisions the possibility of Social Security taxes rising to 20 per cent of taxable income by the end of the decade—10 per cent of the tax base of $9,000 from the employer and 10 per cent from the employee. The tax base now stands at $4,800. The maximum tax on the self-employed making $9,000 a year would be 15 per cent.

Mr. Taxpayer is the man whose future is being sold down the road to socialism without the benefits of a complete cradle to the grave coverage. Needless to say, his grandchildren will probably "enjoy" that.

This taxpayer is the man who has paid for Socialized Medicine which England now has. For we have given billions to Great Britain since World War II. True, their Socialized Medicine may be popular to some but it is the American Taxpayer who has paid for it. Can he afford it for himself in the United States.

It has been reported in *The Charleston Gazette* that the Medical Assistance for the Aged program (Kerr-Mills Bill), which was enacted into law by Congress last year, is only temporary. Apparently this editorial writer is not aware that this is a Law, on the statutes of the United States, duly signed and made into Law. If this is temporary, it does not read so in the Law that was enacted.

If the King-Anderson Bill is enacted into law and your over 65 patient comes to consult you, when he looks at you through his Social Security bifocals and speaks to you through his Social Security dentures, you had better be ready with his taxi fare home. It's a cinch that son or daughter who used to bring him to your office won't be there. He won't be able to afford a car to drive Dad to town.

Our good friend, Charlie Lively, remains in the hospital and shows steady improvement. He has enjoyed your messages and they have been a real source of happiness to him. Son Bill is ably carrying on and the state office is running smoothly. The loyal staff in the office is helping to make Bill's job easier. We owe them all a debt of gratitude.

The hour may be late but don't lose an opportunity to put in a word for the free practice of medicine and for our American way of life.

John W. Hash

John W. Hash, M. D., President

THE WEST VIRGINIA MEDICAL JOURNAL

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EDITORIALS

POLITICAL PHARMACY

One of the mysteries of life to us is how much better a man who has never done a job can do it, at least in his own estimation, than the man who with sweating brow and straining back is trying his utmost to do the job passably well. Active practicing physicians cannot help but look with deep concern at the efforts of the coonskin-bedecked Senator from the Volunteer State to control the drug industry from a Washington bureau of some type and especially to hamstring pharmaceutical research. Accordingly, we who must use drugs daily in our efforts to relieve human suffering do not feel that we are transcending the bounds of propriety in discussing the proposed drug control legislation.

We cannot agree that Federal licensure of drug manufacturing firms is necessary or even desirable. In our own eyes, the bureaucratic hand of Washington is already stretched too far out into the life of every individual, into every industry, and into local affairs everywhere. We presume it is possible that some good might result from Federal licensure, but at the moment we just do not see any. One definite disadvantage of Federal licensing of the profession—and pharmacy is definitely a profession—is that it would necessarily act as a brake on the drug manufacturers, and certainly retard research and the development of new products. The present Food and Drug Administration is doing a pretty good job. It has certainly minimized false and misleading advertising and we feel sure can be entrusted to carry on without further legislation.

To give the Food and Drug Administration control over "effectiveness" as well as safety sounds somewhat bizarre. It means transferring judgment from the actual practitioner of medicine, who is at the bedside doing a job, to a man miles away in Washington who, despite whatever theoretical knowledge of pharmacy and medicine he may possess, is really a chair-warmer rather than a physician trying to relieve a patient. We are unalterably opposed to leaving the judgment as to "effectiveness" to Washington.

The recent anti-Castro debacle casts grave doubt upon Washington's "effectiveness." The man actually doing the treatment job should be free to prescribe whatever remedy he deems wise at the time regardless of what some Washington bureaucrat believes or says. The state licensing boards of this country, instrumentalities of the police power which the Constitution wisely reserves to the individual states, are doing a very satisfactory job and certainly the great majority of practicing physicians can be entrusted to use good professional judgment and sound common sense.

We find ourselves in thorough accord with the distinguished Senator in his efforts toward stringent control of advertising and sales promotion, especially the advertising. Excluding improper

advertising copy, and admitting only worthwhile items and factual statements about these, keep a medical editor on his toes all the time.

As to prescriptions by generic rather than brand names, this is to be encouraged only when all manufacturers are turning out a satisfactory product under a generic name. Very recently *The Medical Letter* has shown that there is definite variation in some generic name products both in content and in price and that, generally speaking, the cheaper the price the less accurate the statement as to the active ingredient content.

We cannot see the advisability, or incidentally the honesty, of making available most patents to all manufacturers. We are sure that most of the drug firms operating today never market a product unless they are sure that they can back it up. The firm which develops a worth-while product and patents it, should retain the patent rights just as is done in any other line of commerce. Not to do so would not only destroy initiative but would produce stagnation of research and hamstring progress in pharmacy.

Another point upon which we can agree wholeheartedly with the distinguished Senator is his idea of unlimited authority for the FDA inspection. That should be a part of any legislation passed for the regulation of the drug industry. It might degenerate into a petty nuisance to the drug men, but it would tend to keep them in "the straight and narrow pathway" in business.

We cannot accept the statement that drug advertising has been altogether "objectionable" and "uninformative," and that competition is minimal. Any physician who has to listen to detail men practically every day of his life certainly does not see any evidence of limitation of competition; just the opposite, competition is keen. One of the chief objectionable features of the advertising is the frequent repetition by mail of the same, or essentially the same, advertising literature. Also, another objection is that this type of matter is handled by the Post Office Department without profit if not at an actual loss. Most of this material is informative (and some of it is biased) but one gets tired of so much repetition. Fortunately we have a very commodious wastebasket to which a large percentage of this "literature" is consigned.

We cannot swallow the insinuation that too much money is expended in research. On an average only two per cent of all drugs tested out are marketed, and it is of as much value to the populace generally to know what drugs to discard as which to market. Research is the key to progress and only can we progress, especially in medicine and therapeutics, by intensive and continued research.

We have tried to paint this legislative picture from the standpoint of the fellow sitting on the other side of the table from the legislator; that of the man who actually has to do the job of relieving the patient's pain and restoring him to health and productivity. We trust that the wild-eyed aspects of the Senator's pipe dreams are rejected by his senatorial confreres.

GOVERNMENTAL REGULATION OF MEDICAL RESEARCH

There are presently two proposals to regulate animal experimentation before the Congress of the United States, the Griffiths Bill (HR 1937) and the Moulder Bill (HR 3556). These have been referred to the Committee on Interstate and Foreign Commerce of the House of Representatives.

There are many objectionable features in this proposed legislation. For example, scientists would be required to file project plans describing experimental procedures to be employed in pursuit of their researches. Before any change could be made in the original procedure, governmental approval would be required. Under these circumstances it would be difficult to explore other avenues of approach, or to follow up interesting leads in the course of the research.

Another most undesirable feature is that elaborate record-keeping and reports would be required. These would be in addition to those needed for keeping scientific notes on the progress of the experiments, that is, protocols. This could constitute a greatly added burden to investigators, and would, of course, hamper research production.

The bills suggest further that government inspection would be authorized to stop research and destroy animals, if in the judgment of the federal inspectors, the plans previously approved had not been followed accurately. Such a cavalier approach surely should not exist in a democracy.

The Moulder Bill provides that if any scientist knowingly violates any provision of the Moulder proposal he would never secure a certificate. In other words, he would be reduced to the status of an arm-chair scientist. This would be a catastrophe for the individual, and to the institution to which he is attached.

Perhaps the crowning touch is that the Moulder Bill would demand that only licensed veterinarians or doctors of medicine specializing in anesthesiology could administer anesthesia to laboratory animals. This would be amusing if it were

not so tragic. God save the mark! It is a melancholy comment on human nature to point out that this law would not prevent a nurse from giving an anesthetic to a child or man, but she could not legally administer an anesthetic to a mouse or a dog.

The saddest part of the whole matter is the presumption on the part of the sponsors of these bills that reputable scientists need policing. In the benighted days of the nineteenth century, there were a few workers in the biological sciences who could not be trusted to observe humane practices, but at the present time no scientist could keep his position if he were guilty of wanton cruelty. Science is doing an excellent job policing itself, and any further regulation is unwarranted meddling.

It is unnecessary to belabor the point further. It is obvious that these bills have many undesirable, and even vicious features; if enacted, research would be hampered in the United States is certain.

It would greatly help the cause of medical research if all physicians would write to their senators and congressman expressing opposition to these bills. Physicians should also encourage interested laymen to do the same.

THE BLUE SHIELD

The National Association of Blue Shield Plans has gone on record as supporting the American Medical Association in its endorsement of the Kerr-Mills Medical Aid for the Aged Law passed by Congress in 1960. This action by representatives of the nationwide Blue Shield Plans was taken at their 1961 annual business meeting held at the Edgewater Beach Hotel in Chicago, April 16-18.

Blue Shield Plans hope soon to offer an entirely new uniform program on a nationwide basis. It would be based on "a composite professional service index"; in essence, a national relative-value study to enable Blue Shield to sell and service nationwide accounts. Employers of scattered, large, national concerns would thereby be assured of uniform coverage under all Blue Shield Plans. This national contract service would not conflict with local plan operations, but would alleviate the present inflexible and unrealistic situation of trying to fit widely varying local programs into a single national contract.

As with the original California Relative Value Index, each procedure would be assigned a number of units rather than a price tag in dollars and cents. The value of the unit would be determined locally and thereby afford balance to areas of relative prosperity and depression. Thus far, the most commonly used surgical procedures have been tagged, with an appendectomy serving as a yardstick, and assigned a value of 35. Other examples: joint aspiration, 3; obstetric delivery, 21; thyroidectomy, 52, etc. No medical procedures as yet have been labeled.

Blue Shield is, indeed, in a time of crisis and must be in a position to compete nationally with commercial carriers or drop far back in the race for health-plan leadership.—*Guest Editorial by Joseph M. Farrell, M. D., Huntington, West Virginia.*

ON NOTICE

In the leading editorial of its April issue, *The West Virginia Medical Journal* says "it is not too soon to initiate a campaign with the object of resisting any and all efforts that might be made to repeal the (soft drinks) tax during the sessions (of the Legislature) in 1962 and 1963."

While its circulation is chiefly limited to members of the State Medical Association, *The Journal's* admonition might be well addressed to all the people of West Virginia who actually pay the soft drinks tax. . . .

. . . *The Journal* is not overstating the case by suggesting the possibility of "continued agitation on the part of some to repeal this tax." Indeed, such agitation is already under way, and is generously financed. The campaign of the bottlers, spurred into greater action by the national firms from which they hold franchises, has lately taken the form of efforts to indoctrinate the retail grocers of the State. Special emissaries are being sent out by the bottlers' lobby to appear before local meetings of grocers and ask their support on the repeal movement. Fortunately, most of the grocers have correctly detected the real motivation of this effort and have showed little enthusiasm for joining in the repeal movement.

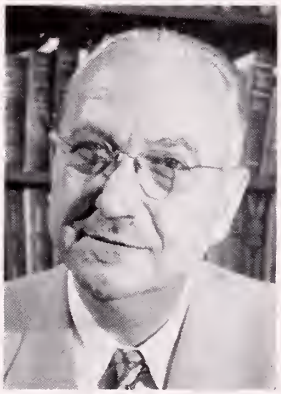
But having already spent so much money in support of the repeal movement and having received new prods from the national firms, the bottlers cannot be expected to relax their efforts. They will be back in Charleston when the next Legislature convenes. Make no mistake about that. And they'll be back, not on behalf of the "poor taxpayers," but purely and solely for their selfish benefit. They don't want the pop-drinkers to be spared the necessity of paying that $3 million that goes to the Medical Center; they want only the opportunity to pocket that $3 million themselves.—*The Morgantown Post.*

GENERAL NEWS

Plans Nearing Completion for Annual Meeting at The Greenbrier

The Program Committee has announced that three distinguished physicians and surgeons have been added to the list of guest speakers who will appear on the program at the 94th Annual Meeting of the West Virginia State Medical Association at The Greenbrier in White Sulphur Springs, August 24-26.

Dr. Halvard Wanger of Shepherdstown, the chairman, said that Drs. Karl A. Menninger of Topeka, Kansas, Edward L. Compere of Chicago, and Waldo E. Nelson of Philadelphia, have accepted invitations to present papers during the three-day meeting.



Karl A. Menninger, M. D.

Waldo E. Nelson, M. D.

Doctor Menninger, who is Dean of the Menninger School of Psychiatry, will appear as a speaker at the second general scientific session on Friday morning, August 25. His subject will be announced at a later date.

Doctor Menninger was born in Topeka, Kansas, and attended Washburn College and the University of Wisconsin. He received his M. D. degree from Harvard Medical School in 1917 and served an internship at Kansas City General Hospital, 1917-18.

He returned to Boston in 1918 and served as an assistant to Prof. Ernest Southard at the Boston Psycopathic Hospital. He also taught under him at the Harvard Medical School. In 1920, he returned to Topeka to practice with his father, Dr. C. F. Menninger, and they were joined a few years later by his brother, Dr. William C. Menninger.

The father and two sons established a sanitarium for adults and a residential school for exceptional children. From this beginning has grown the present Menninger Foundation, a non-profit organization for psychiatric diagnosis and treatment and for education and research in psychiatric and psychological fields.

Doctor Menninger has contributed numerous articles to scientific journals and he is the author of several books including *The Human Mind,* an introduction to the field of philosophy of psychiatry now in its third edition. His most recent book is *The Theory of Psychoanalytic Technique,* published in 1958.

He is a member of the American Medical Association, the American Psychiatric Association and the American College of Surgeons. He is a past president of the American Psychoanalytic Association, Central Neuropsychiatric Association and American Orthopsychiatric Association.

His wife, Jeanetta, is Editor of the *Bulletin of the Menninger Clinic* and his son, Dr. Robert Menninger, is affiliated with the Menninger Foundation.

Edward L. Compere, M. D.

Dr. Edward L. Compere, who is Professor and Chairman of the Department of Orthopedic Surgery at Northwestern University School of Medicine, will appear as a speaker during the first general scientific session on Thursday morning, August 24. His subject will be "Helpful Hints to the Doctor in General Practice."

He is a native of Oklahoma and received his M. D. degree from Rush Medical College in 1926. He interned and served a residency at the Henry Ford Hospital in Detroit, 1926-28. Following additional postgraduate work, he joined the faculty at the University of Chicago School of Medicine. In 1940, he was named Associate Professor of Surgery at Rush Medical College and the following year he joined the faculty at Northwestern.

Edward L. Compere, M. D.

Doctor Compere also serves as Chairman of the Department of Orthopedic Surgery at Chicago Wesley Memorial Hospital and as consultant to several other metropolitan hospitals.

He is a member of the American Medical Association, and served as Chairman of the Section on Orthopedic Surgery, 1956-57. He is a vice president of the International College of Surgeons and served as President of the United States Section, ICS, 1958-60.

Doctor Compere served as Editor of the *Yearbook of Orthopaedic and Traumatic Surgery*, 1947-59, and as Associate Editor of the *Journal of Bone and Joint Surgery*, 1954-57.

Waldo E. Nelson, M. D.

Another distinguished speaker will be Dr. Waldo E. Nelson, Professor and Chairman of the Department of Pediatrics at Temple University School of Medicine. He will speak at the third general scientific session on Saturday, August 26, and his subject will be "Infections in the Neonatal Period."

Doctor Nelson is a native of McClure, Ohio, and he received his M. D. degree from the University of Cincinnati School of Medicine in 1926. He interned at the Cincinnati General Hospital, 1926-27, and served residencies there and at the Children's Hospital, 1928-29.

He joined the faculty of the University of Cincinnati School of Medicine in 1929 and was Associate Professor of Pediatrics when he resigned in 1940 to accept appointment as Professor and Chairman of the Department of Pediatrics at Temple University School of Medicine. He also has served as Medical Director of the St. Christopher's Hospital for Children in Philadelphia since 1947.

He is Editor of the *Journal of Pediatrics*.

Governor Barron on Program

As mentioned elsewhere in this issue of *The Journal*, Governor W. W. Barron has accepted an invitation to appear as a speaker at the first general session on Thursday morning, August 24.

Another guest speaker will be Dr. Leonard W. Larson of Bismarck, North Dakota, who will be installed as President of the American Medical Association this month. He will speak before the second session of the House of Delegates on Saturday afternoon, August 26.

Section Meetings

Several of the guest speakers have also accepted invitations to appear on programs being arranged by the Association's sections and affiliated societies which will be held afternoons during the three-day meeting.

Additional information concerning the program will appear in the July issue of *The Journal*. The complete program will be published in the Convention Number in August.

Relocations

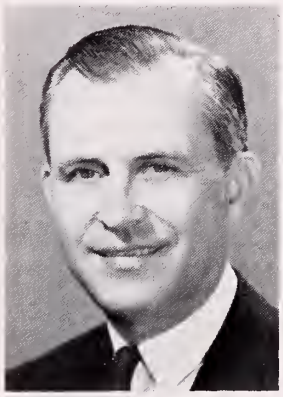
Dr. Glenn Frederick Van Winkle has accepted appointment as a member of the medical department of Union Carbide Chemical Company in South Charleston. He formerly served in a similar position at the E. I. duPont de Nemours Company in Belle.

* * * *

Dr. Richard A. Currie, a member of the staff at the Beckley Memorial Hospital for several years, has moved to Utica, New York, where he will continue the practice of his specialty of surgery. His office address in Utica is 216 Mayro Building.

Gov. W. W. Barron Honor Guest At 94th Annual Meeting

Governor W. W. Barron will be among the honor guests at the 94th Annual Meeting of the West Virginia State Medical Association at The Greenbrier in White Sulphur Springs, August 24-26.



Gov. W. W. Barron

Dr. Halvard Wanger of Shepherdstown, chairman of the Program Committee, announced that the state's chief executive had accepted an invitation to appear as a guest speaker at the first general scientific session on Thursday morning, August 24.

His address will follow opening remarks by Doctor Wanger and Dr. John W. Hash of Charleston, president of the West Virginia State Medical Association. His subject will be announced at a later date.

Governor Barron was born in Elkins, son of the Rev. Frederick H. and Mary Butler Barron. He was graduated from Washington and Lee University and received an LL.B. degree from the West Virginia University College of Law.

During World War II, he served for three years with the United States Army. He returned to Elkins following the war and served a term as mayor of that city. He was elected to the House of Delegates from Randolph County in 1950, and was reelected to a second two-year term in 1952.

Governor Barron served as chairman of the West Virginia Liquor Control Commission, 1953-55, and was elected to a four-year term as Attorney General in 1956.

He was elected the 26th Governor of West Virginia on November 8, 1960, and was inaugurated on January 16, 1961.

Tuberculosis Association Research Grants

Dr. Floyd M. Feldman, director of research of the National Tuberculosis Association, announced recently that medical and social research grants have been awarded by the Association to 33 investigators for the fiscal year beginning April 1.

The grants total $274,039 and will aid research projects in 18 states, the District of Columbia, Canada, Holland and Japan. The grants will help support investigations in the field of microbiology, pulmonary anatomy and function, and epidemiology and the social sciences, and to maintain culture banks of tubercle bacilli and unclassified acid-fast bacilli.

One of the research grants has been awarded to the Veterans Administration Center in Martinsburg to support a study of "Changes in Physiological Dead Space."

Large Delegation of State Physicians To Attend AMA Meeting

A large number of West Virginia physicians and their wives are expected to attend the 110th Annual Meeting of the American Medical Association in New York City, June 25-30. The Woman's Auxiliary to the AMA will hold its 38th Annual Meeting during the same week.

More than 50,000 persons, including 25,000 physicians are expected to attend the meeting. General headquarters for the meeting will be at the Statler-Hilton Hotel, where the House of Delegates will meet throughout the week. Scientific sessions will be held at the Coliseum, and more than 400 industrial and 350 scientific exhibits will also be housed there.

E. Vincent Askey, M. D.

Leonard W. Larson, M. D.

Presiding at the meeting will be Dr. E. Vincent Askey of Los Angeles, California, AMA President. He will deliver adresses before the House of Delegates and Auxiliary, and will participate in inaugural ceremonies for Dr. Leonard W. Larson of Bismarck, North Dakota, who will succeed him as president.

Drs. Frank J. Holroyd of Princeton and Charles A. Hoffman of Huntington will represent the West Virginia State Medical Association as delegates to the meeting. They will attend all sessions of the AMA House of Delegates during the five-day meeting.

The meeting will also be attended by the alternate delegates, Drs. J. C. Huffman of Buckhannon and Thomas G. Reed of Charleston, and by Drs. John W. Hash of Charleston and D. E. Greeneltch of Wheeling, president and president elect of the Association, respectively.

State Physicians on Program

Several state physicians will be among those participating in the scientific sessions during the meeting. Dr. J. E. Martin, Jr., of Elkins, will participate as a member of a panel discussion on "Occupational Diseases of the Chest" which will be presented before the Section on Diseases of the Chest on Monday, June 26. The moderator will be Dr. Frank Princi, Professor of Industrial Medicine at the University of Cincinnati College of Medicine.

Drs. Edward L. Crumpacker and James P. Baker of White Sulphur Springs will participate in a Symposium on "Polypoid Diseases of the Colon" which will be presented on Wednesday, June 28, before a meeting of the Section on Gastroenterology and Proctology. The subject of their paper will be "Proctosigmoidoscopy in Periodic Health Examinations."

Dr. I. E. Buff of Charleston is a member of a six-man committee which will give electrocardiogram and chest x-ray examinations to interested physicians. This particular feature of the meeting will be presented by the Section on General Practice with the cooperation of the American Academy of General Practice, the American College of Cardiology, National Health Institute, National Tuberculosis Association, and the National Heart Institute.

Scientific Sessions

Altogether, more than 2,000 physicians will take part in the scientific program which will include lectures, symposiums, panel discussions, movies and closed-circuit television.

One of the features of the scientific program will be a one-day meeting on Monday sponsored jointly by the AMA and American College of Chest Physicians. The program will consist of symposiums, scientific papers, and fireside conferences, where physicians can discuss medical problems of the chest informally. The conference will be built around 36 roundtables where attending physicians along with prominent scientists will talk about recent advances in diagnoses and treatment of all types of heart-lung diseases.

On Tuesday, June 27, the AMA will sponsor a "research forum." Participants will represent a cross section of every medical specialty and will provide the physician with the newest and most up-to-date knowledge in man's never-ending fight against disease.

More than 50 motion pictures will be shown throughout the week. They will cover the newest developments in many branches of medicine, including obstetrics and gynecology, pediatrics, neurology and the heart.

The second U. S. International Medical exhibit featuring a series of outstanding medical films from many parts of the world will be presented. In many instances, authors of the films making up the exhibit will will be present to answer questions from the physician audience.

Sessions of the House of Delegates

The first session of the House of Delegates will be held at 10 o'clock on Monday morning, June 26, and the first order of business will be the selection of a physician to receive one of medicine's highest honors —the Distinguished Service Award. The award is given annually to the physician who has made an outstanding contribution to medicine.

The opening session will also feature addresses by Dr. E. Vincent Askey and Leonard W. Larson, president and president elect, respectively. A president elect to serve one year before inauguration as president in 1962 will be elected during the meeting.

In the past, AMA meetings opened on Monday, but as a convenience to physicians and in anticipation of the heavy attendance, both the registration facilities and the technical and scientific exhibits will be opened

and staffed until 5 o'clock on Sunday afternoon, June 25.

Annual Golf Tournament

The 45th annual tournament of the American Medical Golf Association will be held at the Winged Foot Golf Club in Mamaroneck, New York, on Monday, June 26, in conjunction with the annual meeting of the American Medical Association in New York City, June 25-30.

The club has two championship 18-hole golf courses and was the site of the 1958 U. S. Open Golf Tournament. The annual banquet and presentation of the day's trophies will be held in the club house the same evening.

All members of the AMA are eligible to participate. Golf clubs may be rented at the club house. Additional information may be obtained from Dr. William G. McVay, Box 7007, Kansas City 13, Missouri.

Dr. Gear Named Secretary-General Of World Medical Assn.

Dr. Harry S. Gear of Johannesburg, South Africa, has been appointed Secretary General of the World Medical Association. He will assume his new duties on July 1.

Doctor Gear, who is currently serving as director of pneumoconiosis research, Council for Scientific and Industrial Research in Johannesburg, received his medical education at the Universities of Witwatersrand and London, and practiced in London, Rhodesia and South Africa. He also had hospital and clinical experience in China, the Middle East and Africa.

During World War II, he was assigned as Assistant Director of Hygiene of the Middle East force in which post he was responsible for coordinating the civil medical and health services of all Middle Eastern countries with the war effort. At the international level, Doctor Gear attended the International Health Conference in 1946, was a member and chairman of the WHO Executive Board and served as Assistant Director General and Consultant of the World Health Organization.

Dr. Frank W. Davis To Speak At Meeting in Kingwood

Dr. Frank W. Davis, Jr., of Baltimore, will be the guest speaker at the Seventh Annual Summer Meeting of the Preston County Medical Society which will be held at the Preston Country Club near Kingwood on Thursday, June 22.

Doctor Davis, who is a member of the faculty at the Johns Hopkins University School of Medicine, will discuss "Cardiac Massage."

Physicians throughout the state have been extended a cordial invitation to attend the meeting. There will be various sports tournaments during the day and a banquet will be served in the club house at 6:30 o'clock. Additional information concerning the meeting may be obtained by writing to Dr. C. Y. Moser, Secretary, Preston County Medical Society, Kingwood, West Virginia.

Dr. M. L. Hobbs Leaving University To Accept Post in Huntington

Dr. Milford L. Hobbs, who has served as chairman of the department of pathology at the West Virginia University School of Medicine since 1947, has resigned to accept a position as chief pathologist and director of laboratories at St. Mary's Hospital in Huntington.

His resignation becomes effective on July 1 and he will assume his new duties in Huntington on September 1.

A native of Waynesville, Missouri, Doctor Hobbs was graduated from Washington University in St. Louis and received his M.D. degree from that University's School of Medicine in 1931. He interned at St. Louis City Hospital, 1931-32, and served residencies at the University of Pennsylvania Graduate School of Medicine and the University of Vermont College of Medicine where he also served as assistant professor of pathology. He was a member of the faculty there from 1938 until 1945.

Doctor Hobbs moved to Fairmont in 1945 and was appointed professor and head of pathology and clinical pathology at the West Virginia University School of Medicine in 1947.

He is a diplomate of the American Board of Pathology and a Fellow of the American College of Physicians. He is a member of the Monongalia County Medical Society, the West Virginia State Medical Association and the American Medical Association.

New Officers of SAMA Elected At Meeting in Chicago

William B. Weglicki, Jr., a junior at the University of Maryland School of Medicine, was elected President of the Student American Medical Association during the annual meeting held in Chicago last month.

Donald R. Payne, a student at the University of Texas Southwestern Medical School, was elected vice president, and David Thier of the University of Florida School of Medicine, was named treasurer.

During the meeting, the SAMA House of Delegates passed a resolution supporting the Kerr-Mills Act, and also expressed opposition to Forand-type legislation and compulsory Social Security coverage for physicians.

Summer Camp for Epileptic Children

A summer camp for children with epilepsy will be opened this summer at the National Childrens Rehabilitation Center in Leesburg, Virginia, beginning July 1.

Children from seven to 15 years of age are eligible to attend the camp, which is sponsored by the Federal Association of Epilepsy. Besides taking part in all types of summer camp activities, campers also receive medical and psychological treatment in line with their needs.

Further information may be obtained by writing the National Childrens Rehabilitation Center, Office of Admissions, Leesburg, Virginia.

Spring Meeting of Auxiliary Board Held at Blackwater Falls

Mrs. Clark K. Sleeth of Morgantown, president of the Woman's Auxiliary to the West Virginia State Medical Association, presided at the spring meeting of the Executive Board held at Blackwater Falls Lodge in Davis on April 18.

The session featured a report by Mrs. R. J. Nottingham of Morgantown concerning plans for the annual convention at The Greenbrier, announcements by the president elect, Mrs. Vernon L. Dyer of Petersburg, and a panel discussion on the subject, "Coordinating Auxiliary Activities."

Mrs. J. C. Pickett of Morgantown served as moderator of the panel and participants included Mrs. William A. Ehrgott of Fairmont, chairman of the State Nutrition Committee; Mrs. George F. Evans of Clarksburg, chairman of the Mental Health Committee; and Mrs. Lynwood D. Zinn of Clarksburg, chairman of the Rural Health Committee.

They discussed some of the accomplishments and problems they have encountered during the past year and the ways in which these tasks could be coordinated for more efficiency. The discussion was followed by comments and suggestions by members of the Executive Board and the presidents of county auxiliaries.

The local presidents presented reports on activities undertaken by their group during the year. Mrs. William A. Thornhill, Jr., of Charleston, discussed the By-Laws and Handbook revisions and reminded those present that proposed amendments to the By-Laws must be sent to her thirty days prior to the meeting at The Greenbrier. It was also announced that resolutions must be mailed to Mrs. R. R. Pittman of Marlinton prior to August 1.

Mrs. L. Dale Simmons of Clarksburg, chairman of the Legislation Committee, reported on state and national legislation of interest to the Auxiliary. She urged the members to familiarize themselves with pending legislation which vitally affects members of the medical profession.

The Board voted to award two $250 scholarships to student nurses during the coming year.

Mrs. Sleeth announced that the pre-convention meeting of the Board will be held at The Greenbrier on Wednesday afternoon, August 23, at four o'clock. She also said that the post-convention meeting of the Board is to be held on Saturday morning, August 26, at ten o'clock.

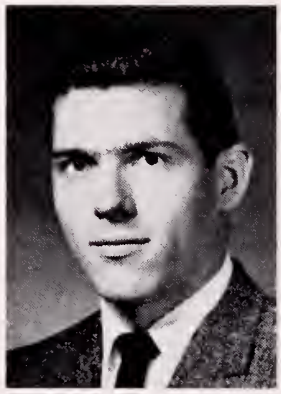
Physicians Art Exhibit in New York

The 24th Annual Exhibition of the American Physicians Art Association will be held in conjunction with the annual meeting of the American Medical Association in New York City, June 25-30. The exhibit will include works of sculpture, painting, crafts and photography by physicians throughout the United States.

Further information concerning the exhibit may be obtained by writing Alfred A. Richman, Secretary, 307 Second Avenue, New York 3, New York.

Wood County Student Selected For Scholarship Award

Clare D. Edman of Parkersburg has been selected by the Medical Scholarships Committee of the West Virginia State Medical Association as the 1961 recipient of the four-year scholarship award to the West Virginia University School of Medicine.



Clare D. Edman

Announcement of the award was made by Dr. J. P. McMullen of Wellsburg, the chairman, following a meeting of the committee at the Medical Center in Morgantown on May 14.

The scholarship, worth $4,000, is awarded annually to a student enrolled in the first-year class at the School of Medicine. Mr. Edman will accept the award formally during the 94th Annual Meeting of the State Medical Association at The Greenbrier in White Sulphur Springs, August 24-26.

Mr. Edman, 23-year-old son of Mrs. Esther A. Edman of Parkersburg, was graduated from Parkersburg High School. He had his pre-medical training at West Virginia Wesleyan College and will begin his studies in September as a freshman in the WVU School of Medicine.

He is married to the former Harriette Pamela Haas of Charleston.

Mr. Edman is the fourth student to receive a scholarship under the program inaugurated by the State Medical Association in 1958. The first recipient was Larry Hemmings of Charleston, who will be a fourth-year student this fall. Scholarships also were awarded to Terry T. Tallman of Alma, Tyler County, in 1959; and to Glenn Buchanan of Gilbert, Mingo County, in 1960.

State Medical's 'Speech Award' Won By Miss Linda Ann Long

Miss Linda Ann Long, a junior at Morgantown High School, won for the second consecutive year the West Virginia State Medical Association's Speech Award of $25.00 for the best paper on a medical subject submitted by a member of the West Virginia Junior Academy of Science during the school year 1960-61.

Her subject was "Problems with Reproduction in Guinea Pigs." Miss Long's selection as the winner of the award was announced at a banquet held in connection with the annual meeting of the Junior Academy at Bethany College late in April.

Mrs. Mabel Davis, a member of the faculty at Morgantown High School, serves as Coordinator of the Academy.

'Operation MoHar' Arouses Interest In Civil Defense Activities

More than 4,000 persons participated in "Operation MoHar," a full-scale disaster exercise, which was held in Charleston on April 22. The drill was sponsored by the Kanawha Medical Society and county and city civil defense authorities.

Dr. Eugene J. Ryan of Charleston, chairman of the Committee on Medical Emergencies and Civil Defense of the West Virginia State Medical Association, served as coordinator of medical facilities and local physicians participated actively in the drill.

The following is a report prepared by Doctor Ryan which was mailed on May 5 to members of the state committee and to chairmen of local disaster committees:

Report by Doctor Ryan

The good which can be accomplished by the initiative of a medical society was vividly demonstrated by the Kanawha Medical Society during the past month. "Operation MoHar," a full-scale disaster drill, was staged on April 22, in Charleston, to test all emergency health facilities as well as the associated County and City Civil Defense activities. The idea was originated by the Disaster Committee of the Kanawha Medical Society and presented to Civil Defense authorities, who agreed to sponsor the drill and worked wholeheartedly with the Society in advance preparations.

A simulated airplane crash into the Morris Harvey College gym as a basketball game was dismissing furnished the background for this test exercise. The resulting 152 "casualties" were evacuated via ambulances, taxis and commercial trucks to all the hospitals in Charleston and South Charleston.

The "casualties" added stark realism to the drill by being made-up with exact duplication of genuine injuries such as lacerations, compound fractures, burns, abdominal wounds, shock, etc. Make-up teams, comprised of members of the Kanawha Players, physicians and morticians, prepared the "injuries." In addition, these "victims," comprised of Morris Harvey College and high school students, plus Red Cross volunteers, tested the skills of the examining physicians and nurses by acting out the symptons accompanying their "injuries." Instructions on such actions were given by physicians of the Kanawha Society's Disaster Committee.

At the hospitals the disaster plans, which previously were mainly plans on paper, were put into full action for the first time. Casualties were sorted into various categories and transported to shock wards, x-ray, surgery, etc. Blood, plasma, morphine and tetanus were ordered and "administered." Identification lists for notification of next of kin were undertaken. Because of "jamming" of the switchboards by inquiries about casualties all communications during the drill were handled by citizen-band and other radio groups.

As might be expected, many, many things were learned by all groups participating. Written reports based on observations, questionnaires to participants, and group follow-up discussions are being compiled. Your chairman served as coordinator for "Operation MoHar," and I shall present a summary report of the entire exercise during the annual meeting of the West Virginia Public Health Association in Clarksburg next week.

I am pleased to report that "Operation MoHar" was documented with colored slides by the Charleston Camera Club. These slides, together with a full report of the drill, will be made available for showings before all component societies. We hope that other societies throughout the State will follow the precedent set by the Kanawha Medical Society and undertake drills of this type to prepare for catastrophies which might strike any of us, any time.

Physicians in the Kanawha Valley participated actively in "Operation MoHar," a full-scale disaster drill which was staged in Charleston on April 22. Following the simulated airplane crash at Morris Harvey College, students made-up with exact duplication of genuine injuries were evacuated to hospitals in Charleston and South Charleston. Drs. George R. Callender, Jr., and James B. Nichols, Jr., are shown examining a "casualty" in the photograph at the left, and Dr. William C. Revercomb, Jr., and an unidentified nurse administer aid to a victim in the other photograph (Photos courtesy of The Charleston Gazette).

Dr. Victor S. Skaff Named President Of W. Va. Chapter, ACS

Dr. Victor S. Skaff of Charleston was installed as president of the West Virginia Chapter of the American College of Surgeons during the annual meeting of the Chapter at The Greenbrier in White Sulphur Springs, April 14-15. He succeeds Dr. Ray E. Burger of Welch.

Dr. Francis L. Coffey of Huntington was elected vice president, and Dr. Jack C. Morgan of Fairmont was reelected secretary-treasurer. Elected as councillors were Drs. John O. Rankin of Wheeling, Kenneth G. MacDonald and William D. McClung of Charleston, and Ray E. Burger.

Speakers at the annual meeting of the West Virginia Chapter, ACS, at The Greenbrier included (left to right) Dr. Robert J. Johnson of Morgantown; Dr. Ray E. Burger of Welch, retiring president of the Chapter; and Drs. Mark M. Ravitch and Howard W. Jones, Jr., both of Baltimore.

Doctors Burger and Skaff served as moderators of the scientific sessions which were held during the two-day meeting. The guest speakers were Dr. Howard W. Jones, Jr., of Baltimore, Assistant Professor of Surgery and Gynecology at the Johns Hopkins University School of Medicine; and Dr. Mark Ravitch, also of Baltimore, Surgeon-in-Chief, Baltimore City Hospital.

Doctor Jones presented two papers during the meeting, "Carcinoma of the Cervix," and "Problems in Pediatric Gynecology." The subjects of Doctor Ravitch's papers were "Surgical Approach to the Treatment of Chronic Ulcerative Colitis," and "Esophageal Hiatus Hernia."

In addition to the out-of-state speakers, a number of papers were presented by West Virginia physicians.

Prizes were awarded for the two best papers by residents. First prize was won by Dr. Andres R. Morales, resident in surgery at Charleston General Hospital, who presented a paper on "Regional Enteritis."

Dr. Harold P. Dinsmore, resident in surgery at Charleston Memorial Hospital, won the second prize for a paper on "Pitfalls in Colon Surgery."

A social hour was held for physicians, their wives and guests on Friday evening, April 14, and a business session on Saturday morning concluded the two-day meeting.

Cancer Society Meeting in New York

The annual meeting of the American Cancer Society will be held at the Biltmore Hotel in New York City, October 23-24. The theme of the two-day meeting will be "The Physician and The Total Care of the Cancer Patient."

Further information may be obtained by writing the Professional Education Section, American Cancer Society, 521 W. 57th Street, New York 19, New York.

New officers of the West Virginia Chapter, American College of Surgeons, are shown following their election at the annual meeting of the Chapter at The Greenbrier, April 14-15. Left to right (seated), Dr. Jack C. Morgan of Fairmont, reelected secretary-treasurer; Dr. Victor S. Skaff of Charleston, president; and Dr. John O. Rankin of Wheeling, Governor of the Chapter. Standing, Dr. Kenneth G. MacDonald of Charleston, councillor; Dr. Ray E. Burger of Welch, retiring president; and Dr. William D. McClung of Charleston, councillor.

MLB Licenses 11 Physicians As Result Of Spring Meeting in Charleston

Eleven physicians have been licensed to practice medicine in West Virginia following an examination conducted by the Medical Licensing Board in Charleston, April 10-12.

Ten of the physicians were licensed by reciprocity and one, Dr. Manuel A. Sarmiento of Welch, was licensed as a result of a written examination conducted in January.

Physicians licensed by reciprocity are as follows:

Andrew, Charles Edward, Morgantown
Bloor, Byron Michel, Morgantown
Coppedge, Charles William, Charleston
Ellswood, William Harry, Charleston
Glenn, Donald Lockhart, Man

Jones, Barbara, Morgantown
Kucewicz, William Joseph, Clarksburg
Neilson, Silva Jean B., Bluefield
Skaff, Robert Habeeb, Hyattsville, Maryland
Worsham, Julius Berrye, Pt. Pleasant

The summer meeting of the Medical Licensing Board will be held in Charleston, July 10-12, 1961, for the purpose of examining applicants for licensure to practice medicine in West Virginia.

New Editor of New York Journal

Dr. William Hammond of Scarsdale, New York, has been appointed editor of the *New York State Journal of Medicine*, official publication of the Medical Society of the State of New York. Doctor Hammond, who has served as assistant editor for the past three years, succeeds the late Dr. Lawrance D. Redway, who had been editor since 1952.

He is a native of New York City and attended Columbia University. He received his M.D. degree from McGill University in Montreal in 1927, and took his internship and residency training in that city and in hospitals in Boston.

Auto Emblems Available

A supply of auto emblems, bearing the insignia of the West Virginia State Medical Association, is kept on hand at all times at the headquarters offices in Charleston. The price of each emblem is $3.25 postpaid.

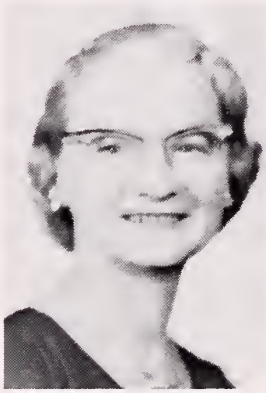
APHA Meeting in Detroit, Nov. 13-17

The 89th annual meeting of the American Public Health Association will be held at Cobo Hall in Detroit, Michigan, November 13-17. More than 5,000 persons interested in public health from this country and abroad are expected to attend the five-day meeting. Scientific sessions and exhibits will feature community health, prevention of disease and control of environmental health factors.

Further information may be obtained by writing the American Public Health Association, 1790 Broadway, New York 19, New York.

AMA Woman's Auxiliary To Meet In New York, June 26-29

The 38th annual convention of the Woman's Auxiliary to the American Medical Association will be held at the Hotel Roosevelt in New York City, June 26-29. More than 3,000 wives of physicians are expected to attend the meeting which is being held in conjunction with the annual meeting of the AMA. "Foods for Survival" and "Common Sense Precautions for Aged Persons Around the Home" are two of the topics which will be discussed during the meeting.



Mrs. Clark K. Sleeth

Mrs. Clark K. Sleeth of Morgantown, president of the Woman's Auxiliary to West Virginia State Medical Association, will be among the official representatives from this state in attendance at the meeting. Several other officers of the State Auxiliary have indicated they will be present and attend business sessions throughout the four-day meeting.

The convention will be formally convened on Monday morning, June 26, with reports of officers and chairmen and election of the 1962 nominating committee. Committee and board meetings will be held on Saturday and Sunday, June 24-25.

The annual tea and fashion show honoring the president, Mrs. William Mackersie of Detroit, Michigan, and the president-elect, Mrs. Harlan English of Danville, Illinois, will be held at the United Nations building on Monday afternoon.

National past presidents of the Auxiliary will be honored at Tuesday's luncheon. The guest speaker will be Dr. E. Vincent Askey, AMA president. The Auxiliary at this time will announce its contribution to the nation's medical schools through AMEF. Awards of merit also will be presented to the state and county auxiliaries contributing the most to this project.

New national officers and committee chairmen will be introduced at Thursday's workshop. The AMA Communications Division will put on a "Speaking Up for Medicine" dramatic presentation to illustrate how Auxiliary members can help to tell medicine's positive story on local radio and TV stations, and in newspapers in their home communities.

A special invitation is extended to all members of medical society advisory committees to state and county auxiliaries and state and county executive secretaries to attend the Thursday morning planning conference and workshop.

Throughout the week a full schedule of activities will be arranged for the teen-aged members of AMA families by the Auxiliary. Auxiliary members and their guests may register in the mezzanine ballroom foyer of the Hotel Roosevelt Sunday afternoon, all day Monday and Tuesday and until noon on Wednesday.

Doctor McDougal Named President Of Blood Bank Association

Dr. Robert A. McDougal of Parkersburg was elected president of the West Virginia Association of Blood Banks during an organization meeting of that group which was held at the St. Joseph's Hospital in Parkersburg on May 7.

Other officers of the Association include Dr. Charles W. Thacker of Parkersburg, president elect; and Mr. Harold Klein of Beckley, secretary-treasurer.

The organization is a non-profit Association of blood banks, and during the meeting ten hospital blood banks were elected to membership as institutional members, and nine physicians, thirteen technicians and one nurse as individual members.

Doctor McDougal announced that the next meeting of the group will be held in conjunction with a meeting of the West Virginia Association of Pathologists in November. The guest speaker will be Dr. James J. Griffits of Dade Reagents, Inc., Miami, Florida.

Applications for membership in the new Association may be obtained by writing the secretary, Mr. Harold Klein, Beckley Memorial Hospital, Box 128, Beckley, West Virginia.

Annual Meeting of W. Va. Heart Assn. In Morgantown on Sept. 15

The annual meeting of the West Virginia Heart Association will be held at the West Virginia University Medical Center in Morgantown on Friday, September 15, 1961.

Dr. Andrew C. Woofter of Parkersburg, the president, will preside at the one-day meeting which will feature a scientific program presented by members of the faculty at the WVU School of Medicine.

The names of speakers and their subjects will appear in a future issue of *The Journal*.

Medical Meetings, 1961

The following is a partial list of national, state and district medical meetings scheduled for 1961:

June 15—B-R-T. PG Meeting, Elkins.
June 22—Summer Meeting, Preston County Medical Society, Kingwood.
June 22-26—ACCP, Hotel Commodore, New York City.
June 26-30—Annual Meeting, AMA, New York City.
July 10-12—Medical Licensing Board, Charleston.
July 12-13—Rocky Mountain Cancer Conference, Denver, Colo.
July 23-26—W. Va. Dental Assn., White Sulphur Springs.
Aug. 24-26—W. Va. State Medical Association, The Greenbrier, White Sulphur Springs.
Sept. 15—W. Va. Heart Association, Parkersburg.
Oct. 2-6—Am. Coll. Surgeons, Chicago.
Oct. 5—Rural Health Conference, Jackson's Mill.
Oct. 18—W. Va. St. Nurses Assn., Clarksburg.
Oct. 19-21—W. Va. Hospital Assn., Morgantown.
Oct. 23-24—American Cancer Society, New York City.
Oct. 27-29—PG Institute, Martinsburg.
Nov. 6-9—Southern Medical Assn., Dallas, Texas.
Nov. 11—Pediatric Conference, WVU School of Medicine, Morgantown.
Nov. 13-17—American PH Assn., Detroit, Mich.
Nov. 28-Dec. 1—AMA Clinical Meeting, Denver.

New Film on Retirement Available For TV and Public Showings

The American Medical Association has announced that a film, "Old Man Young," is now available for public service television and for showings before community audiences.

The opportunities and rewards of retirement are dramatically presented in the 28-minute film which was produced by the AMA, in cooperation with Merck, Sharp and Dohme. The film also stresses the importance of the Kerr-Mills Law in providing health care for the needy and near-needy aged.

The film is available free of charge for television use from Sterling Movies, U.S.A., 43 West 61st Street, New York 23, New York; for showings sponsored by medical societies from the AMA Film Department, 535 N. Dearborn Street, Chicago 10, Illinois; and for all other showings from Merck, Sharp and Dohme Film Library, c/o Ralph Lopatin Productions, 1617 Pennsylvania Boulevard, Philadelphia 3, Pa.

Dr. Whitemore Named Superintendent Of Huntington State Hospital

Dr. Edwin B. Whitemore, Jr., of Marion, Virginia, has been appointed Superintendent of Huntington State Hospital. He succeeds Dr. Edith Cserny, who will assume duties as Superintendent of Barboursville State Hospital, succeeding Dr. Charles Hamner, retired.

Doctor Cserny has served as Superintendent at Huntington since last July, and Doctor Hamner, who is retiring after a long career in institutional psychiatry, has been Superintendent at Barboursville for two years.

Doctor Whitemore received his M. D. degree from the University of Virginia School of Medicine in 1938 and formerly served as Chief of Services at Southwestern State Hospital in Marion, Virginia.

He was chief of staff at Central State Hospital in Petersburg, Virginia, and was superintendent of the training school there before moving to Marion.

New Medical Schools Needed

Frank Bane, chairman of the Surgeon General's consultant group on medical education, in his 1959 report implies that to maintain the present national ratio of 118.4 physicians per 100,000 population will require 11,010 medical school graduates a year by 1975. This is approximately 3,600 more than are now graduated annually.

While some of this increase may be met by expanding facilities in existing schools and establishing a number of two-year schools, the Bane committee estimates that 21 new four-year schools in 11 states will be needed.—Massachusetts Physician.

Grief can take care of itself, but to get the full value of joy you must have somebody to divide it with.—Mark Twain.

The West Virginia Medical Journal

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Endometriosis*

Richard W. Te Linde, M. D.

Endometriosis was described by Sampson as "the presence of ectopic tissue which possesses the histological structure and function of the uterine mucosa. It also includes the abnormal conditions which may result not only from the invasion of organs and other structures by this tissue, but also from its relation to menstruation." It is an extremely fascinating condition, for nowhere else in human pathology does benign tissue possess the ability to invade adjacent tissue. The solution of its histogenesis and treatment offers a stimulating challenge to gynecologists and more particularly American gynecologists because most of the progress that has been made in the study of this disease is the result of American investigation.

There are two types of endometriosis: the internal and the external. The former involves the uterine musculature and forms the pathological entity known as adenomyosis. Although minor degrees of this condition are common, sufficient involvement of the uterus to give rise to clinical symptoms is rare and will not be discussed in this paper. We will concern ourselves solely with external endometriosis which involves tissues outside of the uterus and the serous surface of the uterus from without. It is of great clinical importance and frequency.

Pathology

External endometriosis is being recognized today much more frequently than formerly due to better pathological service in most hospitals but there is a strong probability that the disease actually is on the increase. In the fifteen-year period prior to 1948, 8,789 pelvic laparotomies were done on the gynecological service of the Johns Hopkins Hospital. In 5.6 per cent of these, external endometriosis was found. In considering the incidence year by year it is noteworthy that there was a steady increase in incidence. For example, in 1933 endometriosis was present in 3.2 per cent of the abdomens opened, whereas in 1947 the incidence had risen to 9 per cent. We do not believe that the increased incidence could have been due to better recognition of the condition because we have been acutely aware of the condition ever since Russell, in 1899, first described endometrium in any ovary in our laboratory. The increase was due almost entirely to a greater incidence in the white private patient group, in which the incidence was 7.5 per cent in 1933 and 21.6 per cent in 1947. The possible significance of this will be discussed later in this paper.

Endometrial growths have been described in a great variety of places, chiefly within the female pelvis; the organ most frequently involved is the ovary. In addition to these usual sites some very unusual and rare locations have been reported, such as the pleural cavity, the forearm and the thigh.

The lesions of the ovary vary in size from that of a pinhead to those lesions larger than a child's head. The pinhead sized lesions are most frequently on the convex ovarian surface and vary in color from dusky red to brownish black, depending upon the state of preservation of the contained blood. The larger cysts usually are rather thick-walled and dull white in color or,

The Author

- **Richard W. Te Linde, M. D., Emeritus Professor and Head of the Department of Gynecology, Johns Hopkins University School of Medicine, Baltimore, Maryland.**

*Presented before the Fifth Annual Potomac-Shenandoah Valley Postgraduate Institute at Martinsburg, October 23, 1960.

Submitted to the Publication Committee, December 15, 1960.

in the thinner portion of the wall, the dark chocolate colored contents may darken the wall to almost black. The cysts, large and small, characteristically perforate when the pressure from intracystic hemorrhage becomes sufficiently great. The organization of the extruded blood seals over the defect in the cyst wall, and blood again accumulates in the cavity until perforation again takes place. This discharge and organization of blood results in dense adhesions within the pelvis. The peritoneum, irritated by this blood, becomes hyperemic and thickened. Upon opening the peritoneal cavity the characteristic picture is a variable amount of old blood, free in the cavity. Usually the amount of free old blood is scant but, in rare instances, when large cysts have ruptured, it may be as much as 100 cc. to 200 cc. When the cysts are dissected free at operation there is inevitably spilling of the contents from the points of previous perforation. Generally, the contents consist of thick brown fluid from which the name chocolate cyst is derived; sometimes the contents are tenacious and almost black. The Germans have called these "tar cysts" and, indeed, the contents may resemble tar more than chocolate. The presumptive evidence is in favor of an endometrial cyst when upon dissecting free an adherent ovarian cyst chocolate or tarry substance appears. This is not an invariable rule, since hemorrhagic corpora lutea and other types of ovarian cysts may give a similar picture. The blood in a corpus luteum hematoma, however, is much more apt to form a clot rather than remain a thick fluid as in an endometrial cyst. Hemorrhage into a serous cystadenoma may give a chocolate color to the contents, but the blood being mixed with serous fluid is not usually sufficient to alter the thin consistency of the fluid.

Next to the ovary the uterus is most frequently involved. The serous surface of this organ often is the site of many implants. They usually are very small, although occasionally they form dark vesicles as large as peas. Wherever the endometrial lesion occurs on serosal surfaces there is apt to be a characteristic puckering of the serosa about the small dark lesion. Implants on the anterior surface of the uterus often cause adhesions between it and the peritoneal surface of the bladder. Invasion of the bladder wall may even penetrate through the mucosa and cause intermittent hematuria.

The cul-de-sac is a favorite place for endometrial implants, the posterior wall of the cervix and vagina becoming densely adherent to the anterior rectal wall, completely obliterating the cul-de-sac. The uterosacral ligaments on either side of the cul-de-sac commonly are involved in the endometrial growth and form small, puckered, shotty nodules along the course of the ligaments. Extension downward in the cul-de-sac may penetrate the mucosa of the posterior vaginal vault and be visible through a vaginal speculum as a dark nodular mass behind the cervix. In fact, any serosal surface in the pelvis may become involved in the process. This includes the rectum, the sigmoid, the cecum and the appendix. Rarely the bowel growth may be large enough to cause complete or partial obstruction. More often the rectal involvement gives rise to a sensation of irritation and a frequent desire to defecate. Many cases have been reported in laparotomy scars, especially after cesarean section, and the umbilicus occasionally is the site of a mulberry-like lesion from which the woman may menstruate.

Endometriosis in its various sites may present a variety of histologic pictures. In many instances, especially when located in the ovary, there are typical uterine glands and an abundance of typical endometrial stroma. In the large chocolate cysts the epithelium lining the cavity is thinned out by pressure, sometimes to the point of being unrecognizable; indeed, in some areas, the epithelium may be entirely lacking. Stroma, also, may be very scant in some of the lesions, and one may be forced to search diligently for sufficient stroma to identify the tissue. When endometrium grows in a setting of smooth muscle, as in the uterosacral ligaments or the musculature of the uterus, it often seems to stimulate the proliferation of the muscle causing it to grow in whorls between the bits of endometrial tissue.

In many instances the glands and stroma go through the normal cyclic changes identical to those experienced by the endometrium in its normal site; during pregnancy a full decidual reaction frequently is noted. The typical menstrual cyclic changes, however, are not seen universally, and the endometrial pattern of the ectopic tissue may be purely proliferative, showing no progestational change; there may be areas in which the typical Swiss cheese pattern of hyperplasia is present.

Histogenesis

How does this endometrial tissue get into these abnormal positions and become established there? The early investigators, such as Cullen and Russell, believed the ectopic tissue to be the result of misplaced embryonic mullerian rests, but made no attempt to explain the mechanism whereby the tissue was disseminated. Not until Sampson's contributions, which first appeared in 1921, did gynecologists begin to bend seriously to the task of studying the histogenesis of this disease. Sampson believed that ovarian and other

forms of peritoneal endometriosis arose from the implantation of bits of endometrial tissue cast free at the time of menstruation escaping through patent fallopian tubes and lodging on the surface of the ovaries or other pelvic structures.

Other investigators conceived of metaplasia of the serosal cells of the peritoneum. Still others believed the bits of endometrium to be transported via the lymphatics. The chief argument against Sampson's theory was that the endometrial particles which are cast off at menstruation appear on histological examination to be necrotic and incapable of growth. Sampson replied that if all of the endometrial cells were dead, his theory also was dead and should be buried, but that if any cells were alive, then his theory still was tenable.

Several laboratory experiments were done on animals demonstrating that endometrium is capable of transplantation and growth, but this endometrium was not the desquamated particles which are cast off at menstruation. The author and Roger Scott attempted to answer this by separating the monkey's uterine cervix from the vagina and deflecting it either anteriorly or posteriorly, thus permitting the monkey to menstruate into her own peritoneal cavity. The operative experiment was carried out on 10 monkeys. Four died of intercurrent disease; in the remaining 6, there developed typical endometriosis within the pelvis. Several months were required before endometriosis developed to the extent that it could be recognized but when it did develop it was quite typical.

The experiments on monkeys are supported by four accidental clinical experiments with which we are familiar. In three instances, the cavity of a rudimentary horn of a double uterus failed to communicate with the cervical canal; therefore, the products of menstruation were forced into the tube and peritoneal cavity. In all three instances endometriosis developed in the pelvis on the side of the rudimentary horn. In the fourth case, a maiden woman of forty years, dysmenorrhea developed and eventually amenorrhea, with recurring monthly pain. Examination showed complete obliteration of the upper vagina by adhesions. Laparotomy revealed endometriosis on the posterior surface of the uterus and in the cul-de-sac. These planned experiments on monkeys and accidental experiments on women would seem to support Sampson's theory strongly and to suggest that although most of the cells cast off at menstruation are dead, some of them are alive and capable of implantation and growth. On the other hand it is our belief that endometrial particles occasionally may be transported via the lymphatics and the blood stream. Endometriosis of the umbilicus is an example of probable transmission via lymphatics and the rare case of endometriosis of the thigh and arm scarcely can be explained on any basis other than transplantation via the blood stream.

Symptoms

Endometriosis is a disease which gives rise to symptoms during menstrual life. In slightly over 80 per cent of our cases, the patient who came for treatment was between the ages of 20 and 40. We have encountered a few cases in the 'teens and, occasionally, endometriosis is discovered after the menopause when the patient undergoes operation for other pathology, but it is then asymptomatic.

The most constant single symptom is pain. Since the lesions are so varied in location it is natural that the pain arising from them should be varied in location and nature. In the most common type of endometriosis, with lesions scattered through the pelvis, lower abdominal pain usually is the presenting symptom. The pain may be unilateral or bilateral; the rule is bilateral pain, more marked on one side or the other. It is likely to be aggravated premenstrually or menstrually, leaving a residual pelvic soreness after the period. Nevertheless, in some instances acute attacks of pain may occur entirely unrelated to menstruation. Pelvic distress may vary from a moderate bearing down discomfort to severe boring or knife-like attacks.

Dysmenorrhea is a frequent symptom of endometriosis. It was present in approximately 80 per cent of our cases, but it varied greatly in time of appearance and character. In over half of our cases dysmenorrhea was present from the onset of the period, but in only 9 per cent was there a history of dysmenorrhea developing in a patient who previously had had no menstrual discomfort. In approximately 16 per cent of cases, however, the patient had no menstrual discomfort whatever.

Involvement of the uterosacral ligaments or an adherent retroverted uterus may be responsible for severe sacral backache. These lesions also may cause dyspareunia, which may be a prominent symptom.

When the rectal wall is involved, pain on defecation is common; often there is blood in the stools at the time of menstruation, also at other times due to ulceration. A frequent desire to defecate, without much result, may occur and varying degrees of obstruction may result from sigmoidal or rectal involvement.

When there is endometriosis in the abdominal scar, at the umbilicus, or in the inguinal region, there usually is a history of painful swelling at

monthly intervals. Sometimes discoloration of the skin due to hemorrhage is visible when the lesion is near the surface. Blood has been noted in the urine when the bladder wall is involved.

In spite of what has been said in the preceding paragraphs concerning pain, we emphasize the fact that many women with even extensive endometriosis have no discomfort at any time. Judging by the frequency with which the diagnosis is made with reasonable certainty during routine pelvic examination, it is probable that there are more women with endometriosis without pain than with it. The remarkable fact is that many women with extensive endometriosis have no pain, whereas others with minimal palpable endometriosis have severe pain. Sturgis and Call have attempted to correlate the character of the peritoneal lesions with the degree of pain. They suggest that the lesions which are primarily on the surface of the peritoneum may expand outward in response to hormonal stimulation readily and cause no discomfort. The lesions beneath the serosal surface, on the other hand, according to their belief, develop a fibrous tissue response and, thus encapsulated, distend with difficulty and with pain. Their theory is attractive, but the evidence is not very convincing and we still are completely in the dark on the reason for the discrepancy.

Menometrorrhagia is given by most textbooks as one of the more frequent symptoms of external endometriosis. It was present in slightly over one-fourth of our cases. In this group, however, there were several cases in which associated lesions were present which probably were the cause of the abnormal bleeding. It is probable that in not over 20 per cent of cases of endometriosis is there bleeding as a result of the disease. The abnormal bleeding probably is the result of ovarian dysfunction. The intermenstrual spotting of old blood is due undoubtedly to the escape of the chocolate contents of the ovarian cysts into the abdomen and out through the uterus via the tubes.

Sterility is a common complaint of women with endometriosis. In 33 per cent of our cases the patient was absolutely sterile. The figure rises to 46 per cent if we add those who had an abortion but no living children. The high sterility rate is in contrast to the average sterility rate (approximately 10 per cent) of the general population. The cause of sterility is obvious in some instances, for tubal occlusion is present in about 10 per cent of cases of endometriosis. There must be other factors to account for the high incidence of sterility and one can only speculate concerning these. Perhaps the edema and fibrosis of the tube so commonly found in this disease interfere with the normal tubal peristalsis. Perhaps, also, the chocolate material escaping from the abdomen via the tubes interferes with the action of the cilia. The ovaries oftentimes are walled off by adhesions which may make it impossible for the ovum to escape toward the tubal fimbria. Finally, the factor of dyspareunia and reduced sexual exposure may contribute.

If the patient with endometriosis is fortunate enough to become pregnant the symptoms usually are quiescent during the pregnancy. We have encountered a few cases, however, in which rupture of a blood filled cyst during pregnancy gave rise to acute abdominal symptoms.

Diagnosis

The symptoms discussed above should suggest endometriosis, but it should be emphasized that the symptoms are not sufficiently specific to justify the diagnosis without substantiation by characteristic pelvic findings. All of the abovementioned symptoms can be caused by other pathologic conditions. Adherent adnexa in the case of a woman in the menstrual years in which neisserian, postabortal or puerperal infection can be ruled out with reasonable certainty should cause one to consider endometriosis. In such instances tuberculous salpingitis remains a possibility and must be ruled out or established by history and other physical findings. The presence of shotty induration in the cul-de-sac, in the uterosacral ligaments or on the posterior surface of the uterus probably is the most suggestive single pelvic finding of endometriosis. Marked tenderness on palpation of these areas is the rule. When these findings are coupled with an enlarged adherent ovary the diagnosis is almost a certainty.

When the rectovaginal septum is involved, the pelvic and rectal findings may simulate malignancy of the bowel. Bluish cysts presenting in the posterior vaginal fornix may be very helpful in deciding in favor of endometriosis. Endometriosis in the rectovaginal septum usually is of harder consistency than carcinoma. The endometrial lesion invades the bowel from without and this usually is apparent on rectal examination. When the history suggests that the growth has appeared or grown postmenopausally we can be quite certain that it is carcinoma rather than endometriosis. If in doubt after the usual rectovaginal examination, the patient may be proctoscoped and a specimen removed from within the bowel for biopsy purposes.

Treatment

The treatment of external endometriosis is dependent upon the severity of symptoms, the palpable extent of the disease process, the age and the general physical condition of the patient, the need and the desire for the preservation of the childbearing function or menstruation, and the psychosomatic evaluation of the patient. In the absence of palpable pelvic disease, exploratory laparotomy on the basis of symptoms alone rarely is indicated. In such cases when the history is very suggestive but bimanual examination fails to disclose the characteristic signs, culdoscopy may prove to be of great value in making the final decision for or against laparotomy.

In considering the conservative treatment of endometriosis three courses are available:

1. Simple observation. With the absence of significant symptoms this certainly is the treatment of choice. Occasionally codeine or other mild analgesics may be used. If infertility is an important factor with the patient, active treatment is sometimes indicated.
2. Hormonal therapy. It has been shown that suppression of ovulation either by pregnancy or artificially may cause an alleviation of symptoms and sometimes a palpable regression of the disease process. Recurrence of symptoms, however, is frequent.
3. Conservative surgery.

Hormonal therapy has been given rather an extensive trial. The first hormone to be tried was estrogen. The recommended dosage starts at 1 mg. per day and is worked up to 100 mg. per day. The treatment is carried on for a period of three months and the dose then decreased by 6.25 mg. per day until the last dose is taken. As is the case with so many new therapies, time has shown that this treatment may leave much to be desired. Withdrawal bleeding has been troublesome and in a few instances has made emergency hysterectomy necessary. Also the lack of permanent relief has been frequent and it is our personal view that estrogen therapy for endometriosis is not worth the effort.

Andogens also have been extensively tried as a means of suppressing ovulation, but in our opinion, frequent side-effects such as hirsutism, voice change and acne, contraindicate its use. These symptoms may occur with variable dosage; hence, it is difficult to determine the dosage which will not cause side-effects.

More recently Kistner has used one of the newer progestins, norethynodrel (Enovid), inducing a state of pseudopregnancy. He has shown by endometrial biopsy and by examination of the ectopic endometrial tissue that a pseudodecidua is produced. Kistner recommends a dosage of 10 mg. daily for two weeks, starting on the fourth day of the menstrual period, then 20 mg. daily for two weeks, then 30 mg. for two weeks and finally 40 mg. daily for as long as the therapy is advisable. Side-effects sometimes observed are nausea, breast soreness, increased appetite and gain in weight. A few patients have had bleeding, but Enovid contains a small amount of ethynylestradiol which tends to decrease the break-through bleeding. While there is no doubt that the pseudopregnancy is attended by diminution of symptoms, the ultimate permanent result still is doubtful as is the result regarding future pregnancies. Hence, surgery remains the *piece de resistance* in the therapy of endometriosis.

In considering treatment of this disease one must bear in mind that the growth and the invasive properties of the endometrium depend upon continued ovarian function. There is conclusive evidence that growth ceases and atrophy takes place after surgical or irradiation castration. There is, nevertheless, sufficient evidence to indicate that conservation of the reproductive function is worthwhile in young patients. For example, in Scott's and TeLinde's series of cases there were 64 in which the reproductive function was preserved, these patients being desirous of bearing more children. They were followed for from 9 months to 15 years; of the 64 patients, 26 or 40.6 per cent conceived, and 31.3 per cent had term deliveries; 12.2 per cent of these women, however, required further surgery or x-ray castration. Only a few of the subsequent operations were done in our clinic, and one wonders whether or not all of them were necessary. The above-mentioned percentage of pregnancies following conservative surgery is higher than that reported by most observers. Holmes found that pregnancy took place in 12 per cent of cases in which conservative surgery was done; Hurd reports 10 per cent and Counseller 13 per cent. We are glad to note in more recent publications that others have reported better results. For example, Gray reports 37.2 per cent of pregnancies after conservative surgery and that of 49 patients complaining of sterility 51 per cent became pregnant. Meigs also reports 32.4 per cent of pregnancies following conservative surgery. In most of the cases in our series the patient was operated upon for symptoms other than sterility, and the question arises whether or not surgery is indicated in endometriosis simply for the relief of sterility without other symptoms. We are inclined to believe it is in selected cases with palpable disease.

Conservative surgery for endometriosis consists of removal of the whole involved ovary or resection of part of one or both ovaries, often suspension of the uterus, release of peritubal adhesions, fulguration of small implants, presacral neurectomy and other procedures in special forms of the disease. We resect ovaries more often for endometriosis than for any other condition. A preoperative Rubin's test gives the surgeon information which is valuable to him in making his decision at laparotomy with regard to the structures, precisely, to remove and particularly with regard to the disposition of the tubes. All evident areas of endometriosis should be excised or destroyed by fulguration. Since in most cases the uterus is adherent in retroposition, freeing of adhesions and suspension usually should be done. In those cases in which the uterus is conserved it has been our custom in recent years to perform presacral neurectomy. It is our impression that this is well worth while, but freedom from subsequent pain and dysmenorrhea is not always effected permanently. It should be recognized that in doing conservative surgery there is the possibility that more radical surgery will be necessary. In Scott's and TeLinde's cases, as stated, 12.2 per cent underwent more radical treatment later.

There is one group of patients with external endometriosis to whom child-bearing is no longer important but in whose cases it is most desirable to avoid an early menopause. These patients are chiefly in their thirties and early forties. Hysterectomy with preservation of some ovarian tissue is good practice in this group. Scott and TeLinde were able to follow the patient in 98 cases in which such semi-conservative surgery was practiced; they found that in only 4.1 per cent subsequent radical treatment was necessary because of symptoms from persisting or recurrent endometriosis. There seems to be no doubt that the elimination of the menstruating uterus ensures relative comfort in the pelvis.

In women beyond the early forties, conservative surgical treatment seldom is advisable. Scott and TeLinde followed 112 cases in which radical surgery was done. In the majority of these the patient was past 40, but several were in the fourth decade and a few in the third. As might be expected, no further surgery was required because of persistent or recurrent symptoms of endometriosis.

As may be judged from the preceding paragraphs, surgery in our hands is a flexible method of therapy in contrast with irradiation in which the destruction of ovarian function is essential for relief of the symptoms. In some instances also where there are mechanical distortions in the pelvis due to adhesions such as adherent retroposition, irradiation may not give complete relief even with castration. Therefore, we have reserved irradiation for carefully selected cases, especially in middle-aged women with recurrence of symptoms following conservative or semi-conservative surgery. Enovid might also be given a trial in some of the recurrent cases.

Several special conditions encountered in this protean disease deserve special surgical consideration.

Not infrequently the pelvis is studied with many small superficial lesions on the peritoneal surface of the various organs and ligaments. When in young women conservation of ovarian tissue is practiced, the small lesions may be destroyed with the high frequency fulgurating current.

Occasionally, endometriosis is present on the posterior surface of the retroverted uterus with perfectly normal ovaries and tubes. When the age of the patient contraindicates hysterectomy, such a uterus should be freed, the implants fulgurated, and uterine suspension done.

When advanced endometriosis results in a frozen pelvis involving the rectal wall and other pelvic structures, radical surgery with excision of part of the bowel formerly was practiced. The mortality was high in this type of surgery, and rectovaginal fistula occasionally resulted. Simple supravaginal hysterectomy with double salpingo-oophorectomy is all that is necessary, for the withdrawal of the ovarian hormone will be followed by atrophy of the remaining endometriosis. If even this surgery is not feasible, or if even bilateral oophorectomy seems to be ill advised, the abdomen may be closed, and the patient treated with irradiation.

An extensive lesion in the sigmoid causing obstruction may be difficult to distinguish from carcinoma even at operation. The presence of endometriosis elsewhere in the pelvis is helpful in making the diagnosis. It is rare that the sigmoidal lesion is sufficiently obstructive to necessitate resection and partial obstruction often can be treated satisfactorily by castration.

Endometrial lesions in the umbilical region, in abdominal scars and in the inguinal region are infiltrating lesions and should be excised with a wide margin, for a remnant may grow into a recurrent lesion of sufficient size to produce symptoms.

Usually, endometrial lesions involving the bladder wall invading from the peritoneal surface may be excised easily and safely during the course of the laparotomy when ovarian con-

servation is practiced. If radical ovarian surgery is practiced, local excision is not necessary.

When the rectovaginal septum is involved, and oophorectomy is not desirable because of the youth of the patient, the endometrioma may be excised with the uterus. Endometrial polyps protruding in the posterior vaginal fornix may be controlled at times by fulguration until the patient attains such age that surgical or irradiation castration may be done with less serious results.

Finally, it should be stressed that surgery for endometriosis may be most difficult. The adhesions generally are extremely dense, much more so than the usual inflammatory or postoperative type. Sharp dissection often is necessary, especially in freeing the uterus from the anterior rectal wall. Fortunately, the rectal wall often is thickened by fibrosis so that perforation of it is rare. Nevertheless, in making the dissection it is better to err in leaving a bit of cervical tissue on the rectal wall rather than vice versa. Another point to be stressed is that resection of part of an ovary often is a worth-while procedure in young women. In general, in dealing with other ovarian pathology, complete oophorectomy is preferable to resection if the opposite ovary is normal. This dictum does not apply too strictly to endometriosis in which bilateral ovarian involvement is the rule rather than the exception.

Malignancy in Endometriosis

It is natural that the patient in whose case endometriosis is diagnosed should ask, "What relation does this disease have to cancer?" The correct answer probably is that ectopic endometrium may, in rare instances, become malignant but it has no more proclivity to do so than endometrium within the uterine cavity. Let us examine the evidence:

Sampson recognized the possibility of malignant change in ectopic endometrium and, in 1925, outlined the criteria for such a diagnosis.

These were: (1) the coexistence of benign and malignant tissue in the same ovary which have the same histologic relation to each other as in carcinoma of the body of the uterus; (2) the carcinoma actually must be seen arising in the benign tissue and not invading it from some other source; (3) additional supportive evidence includes the presence of tissue resembling endometrial stroma about characteristic epithelial glands and the findings of old hemorrhage rather than fresh.

In 516 cases of external endometriosis Scott and TeLinde found 8 cases of co-existing malignancy. In 6 of these the character of the malignant growth was of such nature that it even could not have been suspected of arising from the endometrial tissue. In two, however, although Sampson's criteria were not entirely satisfied, histologic evidence was strongly suggestive that the carcinoma arose in the ectopic endometrium.

On reviewing the literature Thompson found twenty reports of from one to several cases in which there seemed to be reasonably good evidence of a transformation of ovarian endometrium into malignancy. These represent a very small percentage when one considers the great number of cases of ovarian carcinomata and endometriosis. The most convincing evidence that endometriosis may undergo malignant change is presented in connection with adenoacanthoma, a low grade malignant lesion arising solely from endometrium. Thompson found that of 20 proven cases of malignant transformation of ovarian endometriosis, meeting Sampson's criteria, in 9 the lesion definitely was adenoacanthoma. In these cases there was no adenoacanthoma of the uterus, thus excluding the possibility of a metastatic lesion.

From the experience in our laboratory and elsewhere it would seem justifiable to conclude that endometriosis is capable of malignant change, but that the incidence is extremely low and is of little importance in the clinical management of patients with this condition. The most common ovarian malignancy arising from endometriosis is adeno-acanthoma.

In addition to malignant changes of endometrium in the ovary there are very rare instances reported in which malignant transformation has occurred in endometriosis in the rectovaginal septum. Lash and Rubestone reported a case and Dockerty and his co-workers reported two cases from the Mayo Clinic. They were able to find only 5 other cases reported in the literature.

Of more clinical importance in considering malignancy in relation to endometriosis is the not infrequent finding of a considerable enlargement of one or both ovaries in a case of obvious endometriosis. There, then, exists the possibility of a coexisting ovarian malignancy of independent type. When this occurs one cannot afford not to explore even though the patient is asymptomatic.

Diverticulosis, Diverticulitis and Cancer*

Robert W. Buxton, M. D.

It has been estimated that 3 per cent of the individuals of the country's general population have colon diverticula. In patients 85 years of age and over, approximately 66 per cent have diverticula. Between these extremes there is evident a steady increase in frequency of these outpouchings of the colon with advancing age. Such a factor in connection with the aging process suggests that diverticula can be included in the group of degenerative diseases, although the reason for their appearance is not so readily apparent.

It is more or less customary to consider diverticulosis a condition that produces no symptoms; if that were the case, its increasing incidence with aging would have little significance or interest. But, of course, it is not the case, for diverticulosis commonly is associated with some degree of disorder in bowel function, described in the patient's history variously as constipation, an irritable colon, flatulence or intermittent abdominal distention. Genuine pain and other symptoms of acute inflammation in a hollow viscus constitute evidence of diverticulitis, though, it is difficult sometimes to confirm the diagnosis by means of the usual roentgen studies.

Surgical intervention, because of the mere presence of diverticula, or even in the early inflammatory stages of the disease, traditionally is not usually advised. Operation becomes urgent when free perforation or an abscess has developed following an episode of diverticulitis. It is less urgent but a strong possibility when severe inflammation and partial obstruction exist. Bowel resection is the only therapy advisable when fistulas or malignant changes are demonstrated.

When to Resect—Primarily

It is well, perhaps, to realize at this time that diverticulosis and diverticulitis are fraught with far greater potential hazards than our past experience possibly could claim. The oft-occurring complications and the tendency of the inflammatory process itself to recur at frequent intervals are well documented. At this moment, primary bowel resection, in the absence of severe complications, is urged (1) when there is a history of recurrent attacks of diverticulitis, (2) following a severe attack of diverticulitis in the patient under age 50, and especially if there are associated urinary tract or small bowel symptoms, (3) when there is hemorrhage, (4) when there is a small paracolic abscess, (5) when the partial obstruction of diverticulitis fails to respond to medical therapy and (6) when diagnostic measures have suggested a neoplasm.

There evidently is a wide latitude in the type of surgical procedure that will suffice in a case in which surgery is necessary for a condition other than associated malignant disease. Not all are ideal.

The present study includes 265 cases of diverticula of the colon observed at the Universtiy of Maryland Hospital between the years 1950 and 1960. In 37 cases some form of operation for diverticulitis was required. In 26 cases (70 per cent), the patient underwent resection of the diseased segment of colon. In 3 cases a freely perforated diverticulum was closed (one of these patients had proximal drainage (colostomy) of the bowel); in 3 cases proximal drainage (colostomy) alone was carried out; 2 patients had drainage of an abscess or perforation and one of these had a proximal colostomy. In 3 cases, simple excision of an inflamed diverticulum was performed. In 7 cases in which bowel resection was done, the patient had a prior or complementary colostomy at the time of resection. Despite these diverse forms of treatment, there was only one case in which there was failure to survive fecal peritonitis. It is evident that even in the presence of far advanced, complicated diverticulitis, operation is well tolerated and the outlook for survival is excellent.

It also is evident in our cases, however, that earlier surgical intervention could have been expected to reduce the morbidity of the disease and, possibly, the number of operations required before the patient was rehabilitated.

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Finally, it well might be emphasized that, when feasible, total resection of the segment containing diverticula, with conversion of the left colon to a straight tube in an effort to prevent stasis, is a worthwhile project. It can be accomplished with earlier attack upon the disease, and it seems not too optimistic to prognosticate that, under such a protocol, the continued, progressive appearance of additional diverticula in the more proximal colonic segments will cease.

Differential Diagnosis

In uncomplicated diverticulitis, the most difficult differential diagnosis involves cancer of the colon. Some patients who present with such lesions have symptoms of a trivial nature; others may have significant bleeding or evidence of diverticulitis. Enough has been written of the variety and complexity of the secondary pathological processes occurring in persons with diverticulosis to make it evident that when carcinoma is present also, the symptoms and clinical phenomena generally will be protean and confusing.

Unmasking Carcinoma

That diverticulosis and diverticulitis may mask or mimic carcinoma first was stressed by Moynihan who, in 1903, presented six cases before the Clinical Society of London. Rowe and Kollmar, in 1952, (forty-six years later) were able, through a review of medical literature, to find only 62 definite cases of coexisting carcinoma and diverticulitis of the large bowel. Their review, in a survey of local hospitals, brought to light 7 additional cases. Ponka and Brush, in 1959, reviewed 355 cases of carcinoma of the colon at the Henry Ford Hospital and found 75 in which there was coexisting and associated diverticulosis. It seems likely that an apparently increasing incidence of the two diseases, in association, could be credited to the careful scrutiny of an increasingly large number of older patients whose clinical disease suggests a disordered function of the colon, the etiology of which is not clearly definable without roentgen studies of the colon and, at times, laparotomy, for diagnosis.

While diverticulosis and cancer both are uncommon in persons under the age of 40, Graham reported cancer of the colon in 2 cases in which the patients were aged 27 and 34 years. In our own study of cases, there were 2 in which the patients, aged 29 and 39 years, demonstrated diverticula, in one of these surgical resection for diverticulitis being necessary; the youngest ages, however, at which we found associated diverticula and carcinoma were 47 and 48. Both are alive and well 5 and 6 years following operation. Such instances are cited only to point up the fact that while both diagnoses are not commonly made in cases of individuals in either of these two decades of life, both are tenable and most surely may exist simultaneously.

Bleeding from the gastrointestinal tract is a common reason for which a patient sees his physician and for which he may be admitted to

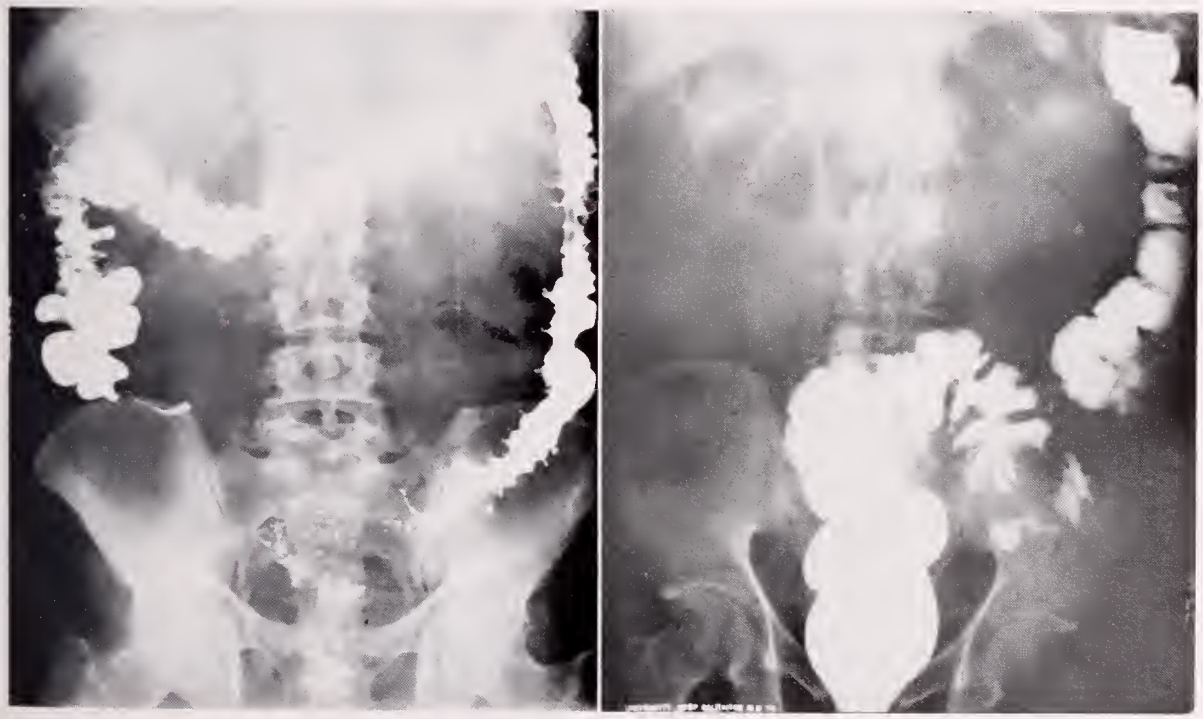

Plate I. G. B., a 56-year-old white male. Roentgen signs suggesting Sigmoid Carcinoma. Histologic diagnosis: Diverticulitis.

the hospital. Blood in the stool or severe bleeding from the lower intestinal tract, however, probably is of little precise diagnostic significance since it may have originated from any one or more of a wide variety of lesions within the tract. Of the 265 cases reviewed, there were 60 (22.6 per cent) in which bleeding from the intestines was one, or the sole, presenting sign of disease; in a third of these the bleeding was considered as acute and massive. In 15 of the 41 cases with minimal, moderate or prolonged bleeding, there was an associated colonic tumor (polyp or carcinoma), while in only 4 of the 19 cases with massive bleeding was there an associated neoplasm (Table 1).

On further study of the cases with bleeding, it was noted that only 19 (7.1 per cent) had no anatomical lesion other than the colonic diverticula demonstrated as a source of bleeding. There was massive bleeding from the diverticula in 2.6 per cent of cases (Table 2).

Table 1

DIVERTICULA OF THE COLON

1950-1960

Gastrointestinal bleeding		265 cases
Minimal to moderate	41	
(a) 15 with associated tumor		
Massive	19	
(a) 4 with associated tumor		
Total		60 (22.6%)

Table 2

DIVERTICULA OF THE COLON

1950-1960

Gastrointestinal bleeding	265 cases
Diverticula only anatomical defect	
Mild to moderate	12
Massive	7
Total	19

Again—Differential Diagnosis

The adenomatous polyp, by far, is the most common polypoid lesion of the colon in all age groups. In size, it may vary from a tiny sessile lesion to a large pedunculated tumor several cm. in diameter. Ulceration and subsequent bleeding may or may not occur. There has been considerable doubt cast upon the precise relation of this lesion to invasive carcinoma of the bowel. The basis of evidence of malignancy is invasion through the basement membrane of the muscularis mucosa and when this has been demonstrated, the lesion may be called carcinoma and treated as such.

Plate II. A. P., a 65-year-old white male. Diverticulitis colon with multiple sigmoid polyps.

As long as the possibility remains that such lesions are premalignant or may represent the early appearance of invasive cancer, physicians show considerable concern when such a lesion is demonstrated roentgenographically or through the sigmoidoscope. When the presenting symptoms are those of a partially obstructing neoplasm, diverticulitis or asymptomatic bleeding and a polypoid lesion within the colon is demonstrated, the question arises as to whether it is a single lesion and the likely source of the patient's presenting complaint, or whether it is a lesion in association with a pathologic process involving another portion of the colon. It seems obvious that a decision must be made also regarding whether it is benign, whether it represents a premalignant state or whether it is malignant.

Above mentioned problems in differential diagnosis caused concern in 50 cases in our series of 265. In each case diverticula were demonstrated within the colon; in only 22 cases (or 8.3 per cent of the total patient group), was car-

cinoma demonstrated ultimately. When presented in this way, the incidence at which polyps or carcinomata are found, usually in the older patient, in association with diverticula is not very impressive. If, however, diverticulosis is an anatomical defect demonstrated largely in persons without serious colonic symptoms and if the presenting symptoms of patients with both lesions, i. e., diverticula and polypoid neoplasm, are more characteristically those seen in acute or chronic diverticulitis, the incidence is more disturbing. In 87 of the 265 cases (34 per cent) in this study, a diagnosis of diverticulitis was made. In 50 cases the patients are known to have had polyps, or carcinoma, or both carcinoma and one or more polyps, in association with diverticula of the colon. In 14 of the 50 cases, there also was a diagnosis of diverticulitis.

In the course of reviewing the clinical pattern in these cases, it seemed probable that a diagnosis of diverticulitis was tenable in most but that it no longer was carried once a more serious lesion was demonstrated. The whole point of these observations and speculations is that very probably the difficult differential diagnosis between diverticulitis and neoplasm involved no more than 137 cases. By comparison, the incidence of tumor (36.5 per cent) and of invasive carcinoma (16 per cent) becomes distressingly great.

Of further interest in this study has been the number of cases in which it was noted that the patient had a large number of associated lesions within, or leading from, the gastrointestinal tube. In 76 cases (28.6 per cent) the patient had diverticulosis alone or in association with disease of the gallbladder. Those in the remaining cases had diverticulitis, colonic neoplasm, Meckel's diverticulum, diverticula of the duodenum, of the stomach and of the jejunum, gastritis, peptic ulcer, or hiatus hernia. Not only may any one of these defects be a source of intestinal malfunction but may be, and often is, a likely and an additional source of bleeding. In more than 85 per cent of cases, the patients in this review

Table 3
DIVERTICULA OF THE COLON

1950-1960

Associated Diagnoses	265 cases
Diverticulitis	87
Colonic neoplasm	50
Duodenal diverticula	23
Peptic ulcer	18
Diverticulum stomach	1
Jejunal diverticulum	2
Antral gastritis	3
Hiatus hernia	29
Esophageal diverticulum	4
Prolapsed gastric mucous membrane	9
Gallbladder disease	31
Pharyngeal diverticulum	1
Meckel's diverticulum	1

Plate III. M. H., a 65-year-old white male. Carcinoma Rt. Colon; Carcinoma Sigmoid Colon; Diverticulosis Totalis.

were past the age of 50 and in 60 per cent were past 60 years of age, so that the incidence of degenerative heart disease, the latter a condition often observed in the cases reviewed, will be seen to increase steadily. There is evidence now that anticoagulant therapy may be of great value in the management of myocardial infarction and in the prevention of peripheral thrombo-embolic episodes so often seen in these cases. The institution of such therapy in this present group of patients entails considerable hazard and must be undertaken cautiously and with the full knowledge and realization of the existence of these lesions. Moreover, when bleeding occurs in these circumstances, or at a time unassociated with the administration of anticoagulant drugs, the multiplicity of lesions offers the physician and surgeon a most difficult problem in localization, where operative therapy is demanded.

Despite the diagnostic difficulties encountered in separating patients with benign inflammatory disease from those with invasive neoplasm, for whom prompt treatment is urgent, the overall survival rate of patients with combined carcinoma and diverticulosis as determined in our small series of cases suggests no significant adverse effect on survival when the two entities exist simultaneously. Coller and Ransom, in their monograph on Cancer of the Colon and Rectum, state that in their analysis of a large number of cases of colon and rectal carcinoma, only in 61.2 per cent of all patients seen and operated on is a cure possible through removal of all gross cancer. Twenty-two such patients are known in this series. Of this number, 11 are dead of cancer or are known to be living, with advancing disease. The other 11 (50 per cent) have been followed for from less than one year to seven years, and are free of disease. Six have been followed 5 years or more since operation.

The above paragraph is written, not to afford the physician a sense of well-being or complacency, but rather to emphasize that there is no inherent reason for pessimism or for the anticipation of extraordinary measures in the treatment of patients who have both diverticulitis and cancer of the colon. Rather, it is to emphasize that awareness of both lesions and that their prompt attack will lead to a satisfactory patient survival rate. Parenthetically, it should be recalled also that accurate and correct diagnosis of the gross lesion at the operating room table is not possible in a number of instances. Morton has emphasized that in complicated diverticulitis and carcinoma, all the characteristic signs of either disease may be so obscured that in the final analysis only the microscopic picture can be relied upon. It would seem simple to procure a biopsy specimen for this analysis, either through the sigmoidoscope or at exploratory operation, but in the presence of much recent and old inflammation which seals off and obscures the neoplasm, this becomes surprisingly difficult—and sometimes dangerous as well.

At the present moment a further method in diagnosis is available. Since 1951, there have been reports of the collection and preservation of cells from saline washings of the colon and the demonstration of malignant cells in these washings with a high degree of accuracy. Our experience with this technique has been favorable when others have been inconclusive. Normal colonic cells are unusually consistent in morphologic appearance thus making the appearance of the malignant cell the more striking in contrast. Because of the simplicity in procuring colonic washings, the absence of exfoliated cells from other organs and the cytologic contrast between normal and abnormal cells, this method of confirmation is particularly applicable to patients with both diverticulitis and cancer of the colon.

Conclusions

The clinical course in 265 cases of diverticula of the colon seen at the University of Maryland Hospital during the past ten years has been reviewed.

No operations for resection were done merely because of the presence of diverticula. Operation was performed in 37 cases of diverticulitis—and its complications—and despite a variety of surgical procedures only one death was recorded. Earlier operation is favored, in an attempt to reduce the morbidity associated with the disease and its complications.

Bleeding occurred in 60 cases (22.6 per cent), was massive in 19 (7.1 per cent). A large number of associated lesions was noted elsewhere in the gastrointestinal tract and the difficulty in localizing the source of bleeding, when it occurs in these cases is emphasized. The hazards of anticoagulant therapy, when the latter is indicated, is mentioned.

In 19 cases there was colonic carcinoma, in 28 there were adenomatous polyps and in 3 cases the patient had both carcinoma and polyps in association with the diverticulosis or diverticulitis.

The difficulty in differentiating diverticulitis and neoplasm is discussed; the use of exfoliative colonic cytologic studies is urged.

References

1. Abel, I.: The Diagnosis and Treatment of Diverticulitis and Diverticulosis, Surg., Gynec. & Obst. 60:370-378, 1935.

2. Brown, D. W. & Toomey, W. F.: Diverticular Disease of the Colon, Brit. J. Surg. 47:485-493, 1960.
3. Coller, F. A., Ransom, H. K. & Regan, W. J.: Cancer of the Colon and Rectum. A Monograph for the Physician. New York, Am. Cancer Soc., Inc., 1956.
4. Ebeling, W. C. & Little, J. W.: The Demonstration of Malignant Cells Exfoliated from the Proximal Colon, Ann. Int. Med. 46:21-29, 1957.
5. Graham, R. R.: Diverticulitis of the Sigmoid Colon, Canad. M. A. J. 36:1-7, 1937.
6. Horner, J. L.: Natural History of Diverticulosis of the Colon, Am. J. Digest. Dis. 3:343-350, 1958.
7. Morton, J. J.: Diverticulitis and Carcinoma of the Sigmoid, Surgery 32:765-783, 1952.
8. Pemberton, J. J., Black, B. M. & Maino, C. R.: Progress in the Surgical Management of Diverticulitis of the Sigmoid Colon, Surg., Gynec. & Obst. 85:523-534, 1947.
9. Ponka, J. L., Fox, J. DeW. & Brush, B. S.: Coexisting Carcinoma and Diverticula of the Colon, Arch. Surg. 79:373-384, 1959.
10. Rankin, F. R. & Brown, P. W.: Diverticulitis of the Colon, Surg., Gynec. & Obst. 50:836-847, 1930.
11. Ransom, H. K.: Treatment of Diverticulitis of the Colon, Am. J. Surg. 92:672-677, 1956.
12. Ransom, H. K.: Diverticulitis of the Colon, Gastroenterology 26:12-25, 1954.
13. Rowe, R. J. & Kollmar, G. H.: Diverticulitis of the Colon Complicated by Carcinoma, Surg., Gynec. & Obst. (Int. Abst.) 94:1-8, 1952.
14. Scarborough, R. A. & Klein, R. R.: Polypoid Lesions of the Colon and Rectum, Am. J. Surg. 76:723-727, 1948.
15. Teicher, I. & Abrahams, J. I.: The Treatment of Selected Cases of Multiple Polyps, Familial Polyposis and Diverticular Disease of the Colon by Subtotal Colectomy and Ileoproctostomy, Surg., Gynec. & Obst. 103:136-146, 1956.
16. Telling, W. H. M. & Gruner, O. C.: Acquired Diverticula, Diverticulitis and Peridiverticulitis of the Large Intestine, Brit. J. Surg. 4:468-530, 1916-1917.
17. Welch, C. E.: Diverticulosis and Diverticulitis, Chicago, The Yearbook Publishers, Inc., (June) 1958.
18. Welch, C. E., Allen, A. W. & Donaldson, G. A.: An Appraisal of Resection of the Colon for Diverticulitis of the Sigmoid, Tr. Am. Surg. Assoc. 71:44-55, 1953.

The Concept of 'Normal'

SINCE nobody is perfect, it is not normal to be perfect. Is a patient normal if the only thing wrong is 20/30 vision in one eye? If his only blemish is a slight case of athlete's foot between two toes? Or if he is 5 pounds overweight?

What is "normal" anyway? Actually there are five possible definitions: (1) normal is what is culturally acceptable. Heterosexuality is normal; homosexuality is not. Obeying the law is normal under this concept. (2) Normal is the statistical average. By this yardstick, it is normal to drive faster than the speed limit; normal to park in a no-parking area. By this standard, normal weights are higher in the U.S.A. than in China. If it were shown that the average of systolic blood pressure of all 50-year old men was, say, 170, then 170 would be the normal systolic blood pressure for this group. (3) Normal is the ideal. If you do not conform to the height-weight tables, then you are not normal. It is not normal to wear eyeglasses or dentures by this concept. (4) Normal is the traditional. A few winters ago, it was not normal for women to wear slacks; a few summers ago it was not normal for them to wear shorts. The norms have changed. (5) Normal is the absence of any finding of disease. An x-ray report that the chest is normal would come under this definition.

Anyone concerned with child rearing will know how plastic the concept of normal is. Is it normal for children to cry, or wet themselves at the age of 18 months? Is it normal for children to be afraid of thunder or for parents to feed them whenever they are hungry.

The slipperiness of the concept of "normal" makes our work more difficult. Patients always want to know whether their blood pressure or blood counts are "normal." New mothers want to know whether the just-delivered infant is "normal." Health and life insurance companies hesitate to insure people who show abnormalities, though they are not certain how to measure "normal."

How much daily (or weekly) consumption of alcohol, or tobacco, is normal? Is it normal to drive to the corner store instead of to walk there? Is a pulse of 86 normal? Normal, let's face it, is a myth. There are at least five definitions, and an imaginative observer can dream up a few more. If none can define it, few can achieve it. Certainly it is not absolute. When asked: "Are the findings normal?" we have a right to answer: "For what set of circumstances?"—Journal, Medical Society of New Jersey.

Cystic Fibrosis (Diffuse Exocrinopathy)*

John A. Prior, M. D.

After years of observation cystic fibrosis now is defined by Andersen[1] as a "congenital familial disease characterized by dysfunction of many of the exocrine glands." The pancreatic pathology of cystic fibrosis first was described by Landsteiner, in 1905,[2] in an infant with meconium ileus. Passini,[3] in 1919, and, later, others,[4, 5] described the relation between the pancreatic lesions of cystic fibrosis and the gastrointestinal features of the disease, thus helping to separate it from the celiac syndrome, a separate clinical entity.

Fanconi,[6] in 1936, first described the relation between familial pancreatic fibrosis and bronchiectasis in three patients. The modern concepts of cystic fibrosis stem from his observations and those of Andersen[7] published two years later. Andersen collected a total of 49 autopsy cases, gave the first definitive description of the disease in the United States and named it "cystic fibrosis of the pancreas." She believed the disease to be relatively common and familial in origin. Blackfan and May,[8] in 1938, reported an additional 35 autopsy cases that clearly demonstrated the relation of the pancreatic lesion to the pulmonary disease. Until that time the pulmonary aspects of the disease were thought to be partially or wholly due to vitamin A deficiency. The bronchial squamous metaplasia and some of the other aspects of the disease are indeed seen in vitamin A deficiency, but further observation proved that any vitamin A deficiency in this disease is the result of poor intestinal absorption of fat soluble substances due to the pancreatic insufficiency.

Further studies soon confirmed the fact that cystic fibrosis was not uncommon and that the most significant clinical aspect was the pulmonary lesion, not the pancreatic insufficiency. With the appreciation of the pulmonary aspects of the disease, certain cases of bronchitis, "chronic pneumonia," and "whooping cough pneumonia," were now correctly diagnosed as cystic fibrosis. The diagnostic and therapeutic emphasis, however, remained focused on the intestinal manifestations of the disease, leaving the more significant pulmonary aspects for less enthusiastic consideration. Farber,[9] in 1945, introduced the term "mucoviscidosis" which for the first time indicated an abnormality at the secreting cellular level. Mucoviscidosis implied an increased viscosity in the secretions of the tracheobronchial tree, pancreas and liver. The name directed attention away from the pancreas and illustrated the growing concept that this was indeed a disease which involved multiple systems. An improvement over cystic fibrosis of the pancreas, the name had considerable merit until di Sant' Agnese and co-workers[10, 11, 12] discovered the electrolyte abnormalities of sweat in patients with this disease, but noted no increase in sweat viscosity. In order to avoid a multiplicity of synonyms, cystic fibrosis still is the accepted name for the disease but, in the light of our current knowledge, exocrinopathy would be a much more accurate term.

Gradually it became apparent that "cystic fibrosis of the pancreas" was not primarily a pancreatic disease; neither was it a cystic nor a fibrotic disease. Instead the basic mechanism appeared to be a disturbance of the function of many of the exocrine glands of the body. Exocrine glands are structures which secrete their products externally through a tube or duct to an epithelial surface. The common denominator in this disease, therefore, is an abnormality in the composition of these exocrine secretions; clinical disease results when the secretions are sufficiently altered to cause dysfunction of the organ. The mucus glands of the tracheobronchial tree, the acinar tissue of the pancreas, the biliary canaliculi of the liver, the secretory tissue of the salivary glands, the sweat glands of the skin and possibly other structures such as the gastrointestinal mucosa may be involved in the disease.

The clinical disturbance is variable and related to the type of the secretion and the function of the exocrine gland involved. Apparently the secretions of the pancreas, liver and tracheobronchial mucosa are too viscous while the ab-

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normal secretions of other organs, such as the skin and salivary glands apparently have normal viscosities. Thus, it would appear that exocrinopathy is a more accurate name than any proposed to date. In spite of its obvious limitations it should be employed, since it connotes a disease affecting the exocrine glands without additional qualifications.

Exocrinopathy

Lung.—The tracheobronchial tree contains numerous mucus glands located in its submucosa. They are found peripherally in the tracheobronchial tree as far as the bronchioles with an internal diameter of 1 mm. It is the exocrinopathy of the mucus secreting glands of the tracheobronchial tree that produces the most serious effects of this disease. The secretions are more viscous and are cleared from the tracheobronchial tree only with difficulty. Retention of the viscid material predisposes to infection and airway obstruction, either of which may predominate. During repeated lower respiratory infections, the thick mucus results in prolongation of illness and favors the development of serious complications. Often cystic fibrosis may be suspected when a child fails to recover promptly from a "chest cold," "flu" or pertussis, with the development, instead, of a chronic cough, chronic pneumonia or atelectasis. Each recurrent infection adds further damage to the bronchi and pulmonary tissues. The thick secretions cause occlusion of the smaller bronchi with the development of emphysema, focal atelectasis and scarring. The lungs become chronically infected, perpetuating and aggravating the already deteriorating situation.

The initial infecting organism in over 90 per cent of cases appears to be the staphylococcus. Knight[13] suggests that since staphylococci grow well in media with high concentrations of sodium chloride, the predominance of staphylococci in the initial cultures may be due to the increase in the sodium and chloride in the pulmonary secretions. Since the staphylococcus does not stimulate any significant protective immune reaction by the patient, it is understandable that in these circumstances the staphylococcus is a frequent and recurrent offender. Antibiotic therapy often causes the staphylococci to be replaced by Pseudomonas or, less often, Proteus. At times the latter two may be grown in pure culture.

When one considers the basic defect in mucus secretion of the tracheobronchial mucosa with its predisposition to obstruction and infection, it should be obvious why 90 per cent of deaths in cystic fibrosis are due to involvement of the respiratory system.

Pancreas.—The pancreatic fluid in cystic fibrosis precipitates as a gel, obstructing the pancreatic duct and producing cystic degeneration of the acinar tissues. This is followed by replacement fibrosis. It is from this process that the disease originally was named. Eventually the exocrine portion of the pancreas may be replaced by fibrofatty tissue, which end stage is termed "lipomatosis of the pancreas." The full cycle of the pancreatic disease requires a variable length of time, usually a few years.

It should be observed that the pancreatic disease is not reversible. The symptoms of pancreatic insufficiency in a given case may ameliorate, but lipomatosis will be found at autopsy. The islet cells, however, are preserved; so diabetes mellitus is quite unusual. Acute inflammation apparently does not occur since there are no reports of acute pancreatitis. Calcification of the pancreas rarely is found by roentgenographic abdominal examination.

Pancreatic involvement by cystic fibrosis, when severe, results in the absence of pancreatic enzymes in the duodenum, but the pancreatic lesion *per se* usually is not fatal. Pancreatic enzymes primarily are associated with the digestion of fat by lipase, protein by trypsin, and carbohydrates by amylase. Digestion of carbohydrates and, to a lesser degree, protein, can be accomplished by other means. Due to the absence of lipase, steatorrhea is the outstanding feature of deficiency of pancreatic secretion.

Before pancreatic insufficiency is detectable clinically, there must be 90 per cent loss, perhaps more, of the pancreatic exocrine function. When this per cent of functional loss is present at birth, meconium ileus may develop. Meconium ileus causes obstruction, usually in the distal ileum, by blocking the intestinal lumen with thick, gelatinous meconium which has an excessive content of mucoprotein. It accounts for 10 per cent of deaths due to cystic fibrosis. Patients who are spared meconium ileus usually will die primarily of the pulmonary disease.

Liver.—When the liver is involved by this widespread disease, bile canaliculi are plugged by inspissated amorphous eosinophilic material, associated with surrounding areas of portal fibrosis with round cell infiltration and biliary proliferation. The lesion, scattered throughout the liver, is virtually pathognomonic of cystic fibrosis and will be seen in from 25 per cent to almost 100 per cent of cases coming to autopsy, depending upon the diligence with which it is sought. In more severe liver involvement the obstructed and dilated ducts are surrounded by dense fibrous tissue, creating irregular lobules of trapped liver parenchyma which

destroy the normal architecture. As a consequence of the above changes, a multilobular biliary cirrhosis appears. The spleen may become palpably enlarged and hypersplenism may occur at this stage. Bile stasis is limited and jaundice is unusual. Despite the fact that focal biliary lesions are quite common, the incidence of the severe cirrhotic form is less than 2 per cent.

Salivary Glands.—The salivary glands are variably involved in cystic fibrosis. According to Bodian,[14] the sublingual gland is always involved with a histologic picture similar to that of the pancreas. The characteristic changes are seen primarily in the sublingual and submandibular glands because their secretions are predominantly mucus while those of the parotids are serous. The parotid gland may have an increased rate of excretion in cystic fibrosis, but increased sodium and chloride concentrations are unusual. To date no clinical significance has been attached to the salivary gland changes.

Sweat Glands.—It is common knowledge among parents that these children taste salty when kissed, and some children therefore have been nicknamed "picklehead." Similarly it was observed that a white, gritty material would form on the foreheads of these children after exertion. Further, it has been observed that some children with this disease "did not do well" during the summer months. Kessler and Andersen,[15] in 1948, noted that during a hot summer spell 5 of 10 children admitted to Baby's Hospital in New York for heat prostration were patients with cystic fibrosis and, on the basis of this observation, developed the original report of electrolyte depletion in cystic fibrosis.

di Sant' Agnese and co-workers,[10, 11, 12] in 1954, demonstrated that the electrolyte depletion was the result of the secretion of sweat containing excessively high concentrations of sodium and chloride. While the rate of sweating was slightly increased in these patients, it was not clinically significant. By metabolic balance studies in patients with cystic fibrosis they demonstrated that the skin was the only route of the abnormal electrolyte loss. There was an obligatory salt loss through the skin, which could not conserve sodium or chloride, even under the salt-saving stimulation of dietary salt restriction. They devised a diagnostic procedure known commonly as the "sweat test" in which the subject is exposed to thermal stimulus and his sweat collected under standard conditions for analysis of the electrolyte concentration. It has been shown that the sweat concentration of sodium and chloride is elevated from two to three times that of normal. In addition, other constituents of the sweat may be similarly increased in patients with cystic fibrosis, for example, thiocyanate, iodides and citrate. In their studies the di Sant' Agnese group found that only those patients with cystic fibrosis had "positive" sweat tests with electrolyte concentrations higher than the normal range. It was at this point that the term "mucoviscidosis" no longer was applicable, and appreciation of the widespread exocrine nature of the disease was realized.

Variability of Manifestations.—One of the outstanding characteristics of cystic fibrosis is the marked variability of its manifestations. The rather rigid criteria originally required to establish the diagnosis was evidence of pancreatic insufficiency. The experience of numerous observers, however, demonstrated that symptoms of pancreatic insufficiency are absent in 10 to 15 per cent of cases. This did not mean necessarily that the pancreas was not involved since careful testing of the duodenal contents might reveal a reduction in enzyme concentrations in some cases without manifestations of pancreatic insufficiency. This is readily understood since approximately 90 per cent of the functioning pancreas must be destroyed before insufficiency becomes evident. Some patients apparently are spared pancreatic disease, while others have it but not sufficiently to cause symptoms.

In those with severe, presumably prenatal, involvement of the pancreas, meconium ileus may be present at birth. The most commonly described cystic fibrosis patient is a child in whose case steatorrhea and chronic recurrent respiratory infection develop between the second and twelfth month of life. The steatorrhea is characterized by from 3 to 5 malodorous, voluminous, greasy, loose stools per day that float in water. Since there is no intestinal absorption defect and since these children often have ravenous appetites, they may get sufficient carbohydrate and protein calories to maintain essentially adequate nutrition despite the imperfect protein metabolism and the fat loss in the stool. In some cases, the loss of nutrients is sufficient to impair normal weight gain.

More recently recognized is the group of patients who have childhood steatorrhea, but in whose cases the stool loses its obvious steatorrheic qualities during adolescence. Necropsy in these cases may show complete lipomatosis of the pancreas, which indicates that an adaptive mechanism may be available at least to some of these patients. Unfortunately, in many cases there is a concomitant increase in pulmonary symptoms that generally are resistant to therapy or, at best, respond quite slowly.

Similar clinical variability is found in the respiratory aspects of the disease. Here the age of onset may be early infancy or the patient may survive into the 'teens or even young adulthood, free of respiratory symptoms. Most cystic fibrosis patients do not survive childhood, dying of pulmonary involvement. As more adults, however, are being studied by sweat tests, more and more are being found with cystic fibrosis. Respiratory complaints, primarily cough, sputum and susceptibility to recurrent infection, may be minimal for years only to erupt at or after puberty into a progressive, relentlessly fatal, respiratory disease.

The character of the pulmonary pathology also is variable. In some cases, the major feature of the pulmonary disease will be infection, while in others emphysema and its sequelae predominate. Many times both aspects appear to develop concomitantly. If the pulmonary pathology does not reach an irreversible stage and the patient survives childhood, some improvement in the respiratory status may occur. Unfortunately, the course of the pulmonary disease often is a stepwise progressive involvement of the lungs following each episode of respiratory infection.

At present, the most consistent measurable abnormality caused by cystic fibrosis is the abnormal increase of sweat sodium and chloride concentration present from birth, and the magnitude of the abnormality apparently does not change with increasing age. There is no demonstrable correlation between the degree of electrolyte increase and the severity of the associated disease. The patient with minor sweat electrolyte abnormality may have rapidly fatal cystic fibrosis, while another patient with mild disease may have exceptionally high sweat electrolyte concentrations.

The earliest changes in the chest x-ray occasionally are noted in the upper lobe. The history of cough, production of purulent sputum and recurrent episodes of pneumonia may be suggestive of bronchiectasis. Often cylindrical bronchiectasis can be demonstrated by bronchography. It is especially important to consider this diagnosis in all young individuals with cylindrical or fusiform bronchiectasis as it is present in many patients with the lung exocrinopathy of cystic fibrosis. Cystic bronchiectasis has not been noted in this disease. Occasionally, the presenting complaint is "asthma." The wheezing respirations attendant on the infection and partial obstruction of the bronchi and bronchioles, together with the chronicity of complaints, may suggest an allergic bronchial disorder. The origin of the wheezing, however, is primarily mechanical, not allergic.

Heat prostration is only occasional. More frequent is the observation of reduction of serum chlorides and sodium concentrations in hospital patients with chronic respiratory disease. This observation should suggest a careful search for other evidence of cystic fibrosis.

Genetics

The great variation in severity of the disease as noted above probably is based on inherited factors that are not too well understood at present. Although much remains to be learned about the genetic factors involved in the development of cystic fibrosis, it would appear that those with a homozygous inheritance have a much more severe form of disease than those in which it is heterozygous. Andersen and Hodges[16] believe that the genetic factor for the disease can occur unexpressed clinically in a given person, which would account for the observation that some relatives of cystic fibrosis patients do have abnormally high sodium and chloride sweat concentrations but have no accompanying indications of disease. Leiberman[17] believes that the abnormally viscous secretions are the result of abnormal protease inhibitor activity. The increased salt content of sweat is produced by alteration of osmotic characteristics of intracellular protein.

Diagnosis

Formerly the laboratory diagnosis of cystic fibrosis was based on evidence of pancreatic insufficiency. A number of tests have been devised to demonstrate pancreatic insufficiency, either directly or indirectly, the most common of these being (1) duodenal drainage for pancreatic enzymes and (2) examination of stool for trypsin. With the discovery that in 10 to 15 per cent of cases the patient with cystic fibrosis does not have a detectable pancreatic defect, these tests have assumed progressively decreasing importance.

The x-ray of the lungs shows patchy, diffuse or miliary pneumonitis, peribronchial infiltration, focal or lobar atelectasis, cylindrical bronchiectasis, emphysema and right heart enlargement. In the later stages a snowflake, diffuse infiltration in the lungs may suggest the diagnosis of cystic fibrosis.

Although not diagnostic, pulmonary function studies are useful in following the course of the respiratory disease. They may show either restrictive or obstructive ventilatory defects or both.

The electrocardiogram is not diagnostic but may show evidence of right ventricular preponderance.

The anatomic diagnosis of cystic fibrosis is based on the demonstration of characteristic findings in the pancreas, sublingual glands, liver and lungs. The only true pathognomonic lesion is found in the liver. Because of the scattered nature of the lesions, wedge biopsy is preferable to needle biopsy.

Today the laboratory diagnosis of cystic fibrosis is based primarily on the sweat test. Because of its basic simplicity and its reliability, it logically has become the diagnostic test of choice. There are 2 to 3 million sweat glands in the human skin occupying a total volume of only 40 cc., approximately, but this small volume of glands has amazing secretory power. Under maximal physiologic stimulation, the amount of sweat secreted may run to 2 liters per hour or reach a total of 10 liters per day. In general, under the stimulus of active sweating the regions of the body with the greatest sweat production are, in order of decreasing volume, the forehead, the neck, anterior and posterior surfaces of the trunk, the lumbar region and the back of the hands. Less sweat is produced on the extremities and the sides of the chest. Some thermal sweating occurs in all areas of the body except the palms and soles which produce sweat only under nervous stimulation.

Since the sweat test is positive in 99 per cent of known cystic fibrosis patients, it is almost unique as a diagnostic aid because of its specificity.[18] Positive sweat tests are reported in approximately 20 per cent of parents and siblings of known patients.[19, 20]

When a normal subject is given desoxycorticosterone acetate (DOCA) or ACTH, a marked fall in the sweat chloride concentration ensues. In patients with hypercorticoidism, such as Cushing's disease and the adrenogenital syndrome, the salt concentration is extremely low in the range of 2 to 14 meq. per liter. In the contrary situation a patient with untreated Addison's disease will have sweat chloride and sodium concentrations which are greatly elevated in the range of 90 to 123 meq. per liter.

Cystic Fibrosis in Adults

Like the initial description of many other diseases, cystic fibrosis at first was reported to be a rare but highly fatal disease. Based on observations at necropsy, the clinician attempted to find the fully developed cases before the patients expired. With increasing experience there has developed a growing awareness of cystic fibrosis, especially among physicians treating children. Many practitioners, however, who see adults principally do not have an adequate understanding of this intriguing disease.

Competent observers have documented the active disease in individuals in the third and fourth decades of life. During 1960, as the result of our interest in this condition we have found 5 patients with cystic fibrosis who were over 40 years of age, the oldest being 67. Three were shown to have cylindrical bronchiectasis and two had long-standing bronchitis with emphysema.

Several diseases, usually of unknown etiology, occur in adults that potentially might be incomplete forms of cystic fibrosis. These include chronic bronchitis, chronic bronchiectasis, emphysema, chronic pancreatitis and peptic ulceration. If symptomatic cystic fibrosis occurs in adults with any degree of frequency, it might be expected to appear in this group of illnesses. Because the pulmonary manifestations are the most frequent and significant aspects of the disease, careful study of chronic pulmonary diseases in adults is suggested as a likely source of investigation at the present time.

Technique of Sweat Electrolyte Determination

In preparation for the collection of sweat, two sites over the back in approximately the region of the kidneys and two areas anteriorly at approximately the same level are washed with 4 x 4 cotton gauze pads saturated with distilled water to a point of faint erythema. After the skin is dried a piece of cellulose sponge 1½ inches in diameter and 3/32 of an inch thick is applied to the skin and covered with saran wrap, the edges of which are sealed to the skin by waterproof tape. In a pre-heated room maintained at a temperature of approximately 92 degrees, the patient is then placed in a waterproof bag large enough to accommodate the body and to allow some freedom of motion. The bag is drawn snug about the neck by a drawstring. The patient is kept in the bag for approximately 60 to 75 minutes to provide an adequate sweat sample. The cellulose sponges are carefully removed by forceps to avoid any contamination by other electrolytes and are placed in a 10 cc. syringe from which the sweat is easily expressed by compressing the sponge to a volume of 0.1 to 0.2 cc. The sweat is collected in a small test tube; the chloride level is determined using the method of Schales and Schales, and the sodium by flame photometry.[21, 22] Only 0.1 cc. of sweat is required for chloride determination and an additional volume of .25 cc. will permit flame photometry study for sodium.

In over 95 per cent of the tests a sufficient volume was obtained to permit determination of the sweat chloride concentration and in 87 per cent there was sufficient volume so that the sodium also could be determined.[23] Dur-

ing the initial twenty to thirty minutes in the bag, little, if any, actual sweating occurs. Once the sweating is started, it rapidly becomes maximal, as a rule, and persists for the remainder of the test. It is recommended that the patient be kept under constant observation during the testing period. Death has been reported[24] in children. In our experience no untoward reaction occurred in over 425 tests. Contraindications are fever, dehydration, vomiting, diarrhea, diuresis, peripheral vascular insufficiency, steroid therapy and marked cardiac and pulmonary insufficiency.

The fingerprint sweat test was introduced in 1956 by Swachman and Gahm.[25] The pad of the finger or the palm of the hand is placed against an agar gel that contains silver nitrate and an oxidizing agent. The chloride of the skin combines with the silver causing the prompt development of a white color or "fingerprint." Because of its simplicity the test enjoyed a period of considerable popularity. Subsequent studies have shown that the correlation between the sweat test and the fingerprint test is not good.

More recently the pilocarpine iontophoresis test[26] would appear to be a much simpler method of obtaining adequate specimens for sweat electrolyte studies. In performing the test, the positive electrode is covered with gauze which is moistened with pilocarpine. After iontophoresis has been applied for from 5 to 15 minutes the iontophoresis electrode is removed, the area is cleansed and, by means of a cellulose sponge or filter paper, the sweat is collected from the area for the next 30 to 60 minutes. The sweat is analyzed for sodium and chloride.

Treatment

Since the pulmonary disease accompanying cystic fibrosis is responsible for most of the deaths, particular attention to the lungs is indicated. The viscid secretions may be rendered thinner by the use of expectorants such as the iodides. Pancreatic streptokinase and streptodornase as an aerosol or by linguet three times a day may be helpful in liquefying secretions. Inhalations of nebulized detergents such as Alevaire® or Turgemist® may be helpful. Either may be inhaled at regular intervals during the day or provided as a continuous flow into a tent in which the patient sleeps.

For the control of infection, antibiotics usually are necessary. Intensive courses of broad spectrum antibiotics each month for 4 or 5 days continuously often are helpful. In some instances, however, virtually year-around antibiotic therapy may be necessary to effect any significant improvement. For the more acute flare-up sulfonamides in combination with full therapeutic doses of Tetracycline seem to work well. This may be supplemented by an aerosol antibiotic such as Neomycin or Polymixin. Because of the danger of sensitization, penicillin, streptomycin or any antibiotic that might be given parenterally or orally should not be used as an aerosol.

As a consequence of the obstructive component, improvement frequently is slow, even with intensive therapy. Since therapy often is necessarily prolonged, culture of the sputum at regular intervals is indicated, as often as each week during the more acute exacerbations. Changes in the bacterial flora may dictate changes in antibacterial therapy.

In the treatment of the intestinal aspects of cystic fibrosis, a high caloric, high protein diet is indicated. The fat content should be greatly reduced. Some patients may be able to manage homogenized whole milk but, in general, foods such as butter, peanut butter, potato chips and french fried potatoes are contraindicated. The extent of the fat reduction necessary is dependent upon the individual patient's response. Pancreatic enzyme (pancreatin) granules before each meal in doses of ¼ to 1 teaspoonful often are helpful in remedying the steatorrhea but response to this therapy is variable. Two to three times the daily requirement of vitamins A and K should be administered. Unrestricted salt intake should be permitted. When the cystic fibrosis patient becomes ill, particular attention to the serum electrolytes is indicated, even in cool weather, since sodium and chloride depletion may be extremely rapid.

References

1. Andersen, D. H.: Cystic Fibrosis of the Pancreas, J. Chr. Dis. 7:58 (Jan.) 1958.
2. Landsteiner, K.: Darmverschluss durch eingedicktes meconium; Pankreatitis, Zentralbl. f. allg. Path. u. path. Anat. 16:903, 1905.
3. Passini, F.: Pankreaserkrankung als Ursache des Nichtgedeihens von Kindern, Deutsche med. Wchnschr. (Part II), 45:851, 1919.
4. Clarke, C. & Hadfield, G.: Congenital Pancreatic Disease with Infantilism, Quart. J. Med. 17:358-364, 1923-24.
5. Harper, M. H.: Two Cases of Congenital Pancreatic Steatorrhea with Infantilism, M. J. Australia 2:663, 1930.
6. Fanconi, G., Uehlinger, E. & Knauer, C.: Das Coeliskie syndrom bei angeborener zysticher Pankreasfibromatose and Bronchicktasien, Wien. med. Wchnschr. 86:753, 1936.
7. Andersen, D. H.: Cystic Fibrosis of the Pancreas and Its Relation to Celiac Disease; A Clinical and Pathologic Study, Am. J. Dis. Child. (Part I), 56:344-399, 1938.
8. Blackfan, K. & May C. D.: Inspissation of Secretion, Dilatation of Ducts and Acine, Atrophy and Fibrosis of the Pancreas in Infants, J. Pediat. 13:627, 1938.
9. Farber, S: Some Organic Disturbances in Early Life, J. Michigan M. Soc. 44:587, 1945.

10. di Sant' Agnese, P. A., Darling, R. C., Perera, G. A. & Shea, E.: Sweat Electrolyte Disturbances Associated with Childhood Pancreatic Disease, Am. J. Med. 15:777-784, 1953.

11. di Sant' Agnese, P. A., Darling, R. C., Perera, G. A. & Shea, E.: Abnormal Electrolyte Composition of Sweat in Cystic Fibrosis of the Pancreas, Pediat. 12:549-563, 1953.

12. Darling, R. C., di Sant' Agnese, P. A., Perera, G. A. & Andersen, D. H.: Electrolyte Abnormalities of the Sweat in Fibrocystic Disease of the Pancreas, Am. J. M. Sc. 225:67-70, 1953.

13. Knight, V.: Role of Staphylococcus. Eighteenth Ross Pediatrics Conference, Ross Laboratories, Columbus, Ohio, 1956.

14. Bodian, M.: Fibrocystic Disease of the Pancreas; A Congenital Disorder of Mucus Production—Mucosis, London, William Heinemann Medical Books, Ltd., 1952.

15. Kessler, W. R. & Andersen, D. H.: Heat Prostration in Fibrocystic Disease of the Pancreas and Other Conditions, Pediat. 8:648 (Nov.) 1951.

16. Andersen, D. H. & Hodges, R. G.: Celiac Syndrome. V. Genetics of Cystic Fibrosis of the Pancreas with a Consideration of Etiology, Am. J. Dis. Child. 72:62-80. 1946.

17. Leiberman, J.: Clinical Syndrome Associated with Deficient Fibrinolytic Activity of the Lung, Pediat. 25:419-431 (March) 1960.

18. di Sant' Agnese, P. A.: Cystic Fibrosis of the Pancreas, Am. J. Med. 21:406-422 (Sept.) 1956.

19. Swaehman, H., Leubner, H. & Catzel, P.: Mucoviscidosis, Ad. Ped. 7:249-323, 1955.

20. Vink, C. L. J.: The Sweat Test in Cystic Fibrosis of the Pancreas, A. M. A. J. Dis. Child. 96:40-45 (July) 1957.

21. Schales, O. & Schales, S. S.: A Simple and Accurate Method for the Determination of Chlorides in Biological Fluids, J. Biol. Chem. 140:879-884 (Sept.) 1941.

22. Hawk, P. B., Oser, B. L. & Sommerson, W. H.: Practical Physiological Chemistry, ed. 12, Philadelphia, P. Blakiston Company, 1948.

23. Peterson, E. M.: Consideration of Cystic Fibrosis in Adults, with a Study of Sweat Electrolyte Values, J. A. M. A. 171:1-6 (Sept.) 1959.

24. Misch, K. A. & Holden, H. M.: Sweat Test for the Diagnosis of Fibrinolytic Disease of the Pancreas; Report of a Fatality. A. D. C. 33:179-180 (April) 1958.

25. Swachman, H. & Gahm, N.: Studies in Cystic Fibrosis of the Pancreas; A Simple Test for the Detection of Excessive Chlorides on the Skin, New England J. Med. 255:999-1001 (Nov. 22) 1956.

26. Gibson, L. E. & Cooke, R. E.: Test for Concentration of Electrolytes in Sweat in Cystic Fibrosis of the Pancreas Utilizing Piloearpine by Iontophoresis, Pediat. 23:545-549 (March) 1959.

Our Poor Relations

Just as, the saying goes, every family has its poor relations, the family of medical practitioners also has its poor relations—too many of them. They are not the kind that have to be assisted financially, but are for sure the kind that ought to be kept hidden in the family closet. I refer to our public relations, those which we as individual physicians bear toward the public as individuals and as a group.

All the efforts of organized medicine, the American Medical Association, go for naught in this field in picturing for the public an image of the physician as a benign, interested, self-effacing, dedicated healer and medical counselor when individual physicians live and practice as hardhearted, pompous, self-aggrandizing, moneygrabbing misanthropes.

The low status to which we have fallen in the eyes of the public in the last few generations as compared to the position of trust and respect which was once our traditional, endeared place in the hearts of the community is in largest measure due to the carlessness with which we conducted ourselves, our poor rapport, our lack of communication. How many of us are guilty of being curt, short-tempered, unreachable, impatient with patients who are perhaps a little demanding, thoughtless, and in some instances not physically ill but in need of counsel and reassurance?

In these troublous times for the profession, when we move from crisis to crisis without fully settling any of them rarely to our own satisfaction, when we keep fighting rear guard actions and find ourselves giving a little ground here and a little there in an effort to stave off completed capitulation to the desires of self-styled dogooders and bureaucrats in government and other administrations with whom we must constantly deal, it behooves us to dress up the face we turn to the public, our patients. This is not a suggestion that we act a part we do not sincerely feel lest we be accused of having ulterior motives only, but that we turn over new leaves, if necessary, that we earnestly and in all humility come down off our high horses and behave as true disciples not only of Hippocrates but also of the Great Physician.—Leo M. Wachtel, M. D., in Journal Florida Medical Association.

Special Article

The Home Care Program of the Kanawha-Charleston Health Department

Margaret Reed Caylor, A. B.

RECENTLY in medicine there has been increased attention focused on "home care programs." These programs provide selected patients not needing all the treatment facilities of the hospital with a range of medical, nursing, social and rehabilitative services. The services actually needed are offered in a team approach coordinated through a central agency.

Need for such a program was called to the attention of the community of Charleston, West Virginia, in 1956 when a study, sponsored by the Kanawha Welfare Council, was made of the unmet medical needs of the indigent and medically indigent. The Director of Chronic Disease Control, West Virginia State Health Department, began the groundwork for a Home Care Program. The availability, in 1958, of a federal grant for development of chronic disease programs gave impetus to original program development. Other sources of financial support are the West Virginia State Health Department, the Kanawha-Charleston Health Department and the Kanawha County Department of Public Assistance. The Home Care Program is now a part of the Kanawha-Charleston Health Department and is administered by its director.

The Home Care Program of the Kanawha-Charleston Health Department has its base of operation in the Charleston Memorial Hospital because of the wide range of public health and outpatient clinics available there. All patients must be known or have been known to Charleston Memorial Hospital as inpatients or outpatients to be eligible for the program. Patients also must be indigent or medically indigent. They must reside in Charleston or its immediate vicinity. The patient's home must be physically suitable for care and the family and patient must be willing and able to participate in home care. When the program was first established, one of the criteria for eligibility was that the patient be capable of responding to treatment and rehabilitative efforts but be too ill to obtain such services on an ambulatory basis. After the program began operating, we realized the need in the community for such services for terminal cancer patients and decided to accept these unfortunates on the program.

Submitted to the Publication Committee, April 14, 1961.

The Author

- **Margaret Reed Caylor, A. B., Route 1, 184 L., Seabrook, Texas; formerly employed as a Medical Social Worker, Kanawha-Charleston Health Department.**

Purpose of the Program

The primary purpose of the Home Care Program not only is to shorten the length of stay of hospital patients but to reduce the number of readmissions in these cases as well, by providing better follow-up care. Many instances in which this has been accomplished can be cited.

The acceptance on the Home Care Program of a two-year-old child with the diagnosis of uncontrolled convulsions definitely shortened the length of hospital stay. The patient would have been hospitalized continuously from the time of acceptance on the program in January, 1959, until he expired the following September. The Home Care Team was able to care for the patient in the home during the entire time except for three short periods of hospitalization.

Another purpose of the program is to provide the indigent and medically indigent with a quality of care and a range of services not normally available to this group, and at less cost. It has been possible to provide home care for the growing number of chronically ill and aged patients who do not require institutional care but who occupy institutional beds because a more suitable place for care is lacking.

Because of the therapeutic effect of family environment on many patients, we have found that home care helps to speed recovery. In rehabilitative efforts, it is an advantage to work with patients in their homes, especially in self care and home routine instructions.

Last but not least, the Home Care Program affords medical, nursing and other professional and student personnel teaching experience in environmental medicine. The wide range of diagnoses on the program also helps to enhance the teaching experience. Diagnoses have included cancer, arteriosclerotic cardiovascular disease, stasis ulcers and lymphedema, cerebral hemorrhage, thrombophlebitis, angina pectoris, diabetes, arthritis, glomerulonephritis, fracture, rheumatic fever, Hodgkin's disease, quadriplegia, paraplegia and osteomyelitis.

Members of the Home Care Team

The members of our Home Care Team include Medical Coordinator, Home Care Physicians, Orthopedic Consultant, Nurse, Medical Social Worker, Physical Therapist, Occupational Therapist, Dietitian and Speech and Hearing Therapist.

The Medical Coordinator reviews all referrals and determines whether or not patients are medically eligible for Home Care. He also contacts attending physicians in the community, who have made the referrals or who have previously followed the patients, to obtain past medical history and help in determining whether or not the patient is a suitable Home Care case. The attending physician is consulted regarding the home visits, that is, whether he wishes to make them himself or whether he prefers to have a member of the house staff at Charleston Memorial Hospital assigned to follow the case. In the majority of cases, the house staff carries on the role of home care physician under the close supervision of the Medical Coordinator.

The Medical Social Worker makes the initial Home Care contact with the patient and family to help determine eligibility. After patients have been accepted on Home Care, the Social Worker visits patients frequently to help with emotional, financial, family and other problems that may arise. The Medical Social Worker is the Home Care Program's contact with various other agencies such as the Department of Public Assistance, Child Welfare, American Cancer Society and Vocational Rehabilitation. When necessary, direct referrals are made to other agencies. The Medical Social Worker is responsible also for various administrative duties under the supervision of the Director of the Kanawha-Charleston Health Department and the Director of the State Division of Chronic Disease Control.

In cases in which there has not been an attending orthopedic physician regularly following the patient, our Orthopedic Consultant is contacted regarding any orthopedic problems. The Physical Therapist works closely with the Orthopedic Consultant regarding such problems as bracing, muscle re-education and mobilization.

The Visiting Nurses Association provides the nurses who make the home visits. As they have a good knowledge of the medical needs in their particular areas and as many patients already have been known to their agency, the Visiting Nurse is a great help in determining eligibility. She is able to help us determine if medical and nursing care can be carried on in the home and can give us clues as to family problems and other problem areas we will encounter. Written nursing orders are sent to the Visiting Nurses by the Home Care Physicians.

The Physical Therapist, under physician's orders, carries on physical therapy treatments. The Physical Therapist conducts muscle examinations, does functional evaluations and other types of treatment such as muscle re-education and mobilization, ambulation, massage and functional training. The Physical Therapist has worked with patients with such diagnoses as cerebrovascular accident (both right and left hemiplegia), polio with arthritis, fracture (both hips), chronic arachnoiditis and multiple sclerosis.

The Occupational Therapist also carries on treatments under the physician's orders. Patients are taught various activities such as sanding, making belts, quilting, making pot holders and painting. These activities not only are a form of supportive therapy but help in muscle re-education and mobilization. The Occupational Therapist helps patients with functional training and activities of daily living such as shaving, feeding self, putting on braces, dressing and undressing and locomotion.

The dietitians from the State Health Department's Bureau of Nutrition draw up menu plans and market lists for many of our patients. The Dietitian obtains information regarding the patient's financial status from the Medical Social Worker and the physician writes dietary orders describing the type of diet he wants for his patient. Diets and market lists are drawn up according to how much a patient has to spend for food and according to the medical condition. Diets are interpreted to the patient and the family by the Visiting Nurse.

The Home Care Program can take patients to the Kanawha Speech and Hearing Center at Charleston Memorial Hospital for hearing and speech therapy.

Treating the 'Whole Patient'

The Home Care Program, a relatively new approach to medical care, returns to medicine the theory of treating the "whole patient," a

practice that the "old country doctor" had more time for than does his specialized descendant of today. The team approach of the Home Care Program provides the entire team an opportunity to evaluate from the various professional viewpoints a patient's potential for self-help and to determine a goal for him. Giving the patient individual recognition, teaching and motivating him to use his personal skills, and helping him to take care of his own personal needs have done much to renew his interest in living and to help him regain the dignity and self-respect befitting a productive member of the community.

STATISTICS OF PROGRAM

(September 1958 to May 1960)

Patients Receiving Home Care

- 0 Census Beginning of Period
- 92 Admitted During Period
- 62 Discharged During Period
- 30 Census End of Period

Referrals to Home Care

- 146 Total Received During Period
- 2 Pending at End of Period
- 88 Accepted
- 56 Rejected
  - 9 Medically unsuitable
  - 6 Died before evaluated
  - 7 Ambulatory
  - 5 Affords private medical care
  - 15 Geographically ineligible
  - 12 Not known Charleston Mem. Hosp.
  - 2 Other

Source of Referrals

- 56 Memorial Hospital Wards
- 27 Memorial Hospital O. P. D. & E. R.
- 37 Other Agency or Institution
- 14 Private Physician
- 1 Self
- 3 Family
- 5 Home Care Patient
- 3 Other

Total Visits to Home 2,354

- 1,085 Physician (including consultants)
- 461 Nurse
- 580 Social Service
- 226 Physical Therapist (Employed January 1960-May 1960)
- 2 Occupational Therapist (Was not employed until June 1960)

Total Visits to Nursing Home 309

- 141 Physician
- 76 Social Service
- 92 Physical Therapy

Number of Patients Using Consultation

- 2 ENT
- 4 Nutrition (W. Va. State Health Dept.)
- 1 Radiology
- 2 Surgical
- 2 Urology
- 1 Occupational Therapy (V. R.)
- 1 Physical Therapy (V. R.)
- 1 Neurology
- 13 Surgical (Orthopedic)
- 1 Psychiatry

Doctor-Patient Relationship

PHYSICIANS have constantly been aware of the deficiencies in the existing system of health care, and they have worked steadily at finding remedies for them. Throughout the past 150 years, they have concentrated upon eliminating quackery. They have taken the lead in promoting sanitation both by helping to frame and supporting the passage of the requisite laws and ordinances, and by conducting educational campaigns. To help keep medical education at a high level of efficiency, they have reached into their pockets to help finance the medical schools, and to provide loans to medical students. And together with the hospitals, they have pioneered in the prepayment financing of medical care by developing and perfecting Blue Cross and Blue Shield.

Yet there are other tasks remaining for doctors to finish in the same area. Since it is they who know most about it, they should undertake to make their fellow citizens thoroughly aware of the nature and importance of the doctor-patient relationship, and then —as objectively as they would forecast the probable side-effects of an untried pattern of therapy—they should point out the ways in which the introduction of the government into it as a third party could be expected to affect it. They should make clear in other words, how such a change would affect the patient's continuing to receive kindly care, individually and in such a fashion as best to preserve his dignity, and how this sort of change would affect the doctor's freedom to treat each case according to its particular requirements, and would affect medicine's attractiveness as an occupation in the eyes of talented young people.—Journal, Iowa State Medical Society.

The President's Page

THE date of June 12, 1961, will always be a date of great personal loss to me. On that date my esteemed friend, Charles Lively, slept away. The West Virginia State Medical Association, and indeed the cause of the free practice of medicine everywhere, has lost a loyal and dedicated servant. With a profession of his own, the law, he embraced the ideals of the medical profession and gave of his total strength and every talent, of which there were many, to the furtherance of our principles.

I am grateful for the privilege of knowing "Charlie" Lively. I shall always cherish our friendship. As we have traveled together this year, it was Charlie's wit, good cheer, and intelligence that made the work we were out to do actually enjoyable. Everywhere we went, to the White House Conference in Washington or our own national conferences, people from every state greeted their friend Charlie. When our plane took on passengers in Cincinnati, two doctors got on, greeted Charlie, and the four of us visited to the end of our flight. Once getting into a taxi in Chicago, we shared the cab with a doctor from another state. Charlie called him by name, introduced me and we chatted as old friends.

Since 1942 Charles Lively has been our Executive Secretary and Managing Editor of *The Journal*. He has steered every State President and been our advisor and friend. He came to us with a wonderful background of having been Clerk of the Senate and holding other important posts and so worked for our interests in Legislative matters in such a way as to command the respect of all who knew him.

The West Virginia State Medical Association wishes to express our sympathy to his daughter, Mrs. Mary L. Hoffman, his sons Dr. Charles and William, our assistant executive secretary, and his four grandchildren, of whom he was so proud. We would like, also, to express our sympathy to the members of his staff, Mrs. Mary Hamilton and Miss Becky Linville, who respected and loved him.

"If you didn't love him—you didn't know him!"

John W. Hash

John W. Hash, M. D., President

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EDITORIALS

CHARLES LIVELY

The Fell Reaper with his scythe has come among us and cut down the man probably more dear to the heart of each West Virginia doctor than any actual holder of the M. D. degree. On June 12, Charles Lively departed from labor unto rest.

A native of Weston, and a descendant of the Lively family of Tidewater, Virginia, Charles was educated in the public schools of Lewis County, at West Virginia Wesleyan, and at the West Virginia University College of Law. He was licensed to practice law in West Virginia and engaged in active practice at Weston for several years. He was postmaster at Weston for five years, and was Woodrow Wilson's first State Prohibition Director in charge of permits with headquarters in Parkersburg.

In 1933 he was elected Clerk of the West Virginia State Senate and served eight years. During this period he also edited the *West Virginia Blue Book*. In 1941, he was named by Judge Ben Moore as Clerk of the U. S. Federal Court for the Southern District of West Virginia. The following year he resigned this position to become Executive Secretary of the West Virginia State Medical Association, a post he held until his death. He was also Managing Editor of *The West Virginia Medical Journal* and his work there was outstanding.

He was one of the founders of the Medical Society Executives Association, an organization composed of more than 200 medical society executives at local, state and national levels, and served as its president in 1954-55.

Charles Lively
1887-1961

He was greatly interested in public health work and served for several years as a member of the Executive Council of the West Virginia Public Health Association. In 1959 that organization named him as the Outstanding Layman in West Virginia Public Health Work for that year.

Charles Lively was first, last and always a loyal West Virginian. Several years ago when he was approached to become Executive Secretary of a very much larger medical association at a definite increase in salary, his reply was that he would not leave West Virginia regardless of salary or size of the organization. His life was given over to service to his fellow men and he was popular in every position he filled. Tactful, honest, far-seeing and sound in judgment, he had no enemies; all who knew him were his friends. Close association with him over many years convinces us that we cannot characterize him better than to quote Shakespeare's portrayal of Brutus:

"His life was gentle, and the elements
So mix'd in him that Nature might stand up
And say to all the world; this was a man."

CHARLESTON'S EXAMPLE

Elsewhere in this issue we present a report of an altruistic program which has been developed in the Charleston area. The paper, "The Home Care Program of the Kanawha-Charleston Health Department" is from the pen of Mrs. Margaret Reed Caylor, a former Charleston social worker, and its content affords a challenge to other areas to "go thou and do likewise." What the Charleston group is actually doing is furnishing more service to a needy segment of the populace at less monetary outlay and without disrupting family ties than is done by some of the other more orthodox and longer established plans.

Of course, Charleston has the advantage of aid from the State Health Department but we feel that such programs could be developed elsewhere without this advantage. Certainly with the all-out backing of the local health department and with the dietetic support from the sponsoring hospital, such programs could be developed to the definite advantage of many members of the economic substratum of society, and to the upgrading of the community conscience. Moreover it would give the house staff an opportunity to have an insight into "how the other half lives."

We commend consideration of the plan to our urban communities.

HYPOXIA AND COLOR BLINDNESS

Color blindness is of great practical importance. Presumably for many centuries this condition was not generally recognized. It was first studied scientifically at the end of the 18th century by John Dalton, the distinguished English chemist and physicist. He himself was color blind, and the variety from which he suffered became known as Daltonism, which is now usually designated as red blindness.

Color blindness was rather dramatically brought to the attention of scientists, and laymen as well, by Holmgren when he published his classical work, "Color Blindness in its Relation to Accidents by Rail and Sea," (Smithsonian Institution Reports, Washington, 1878). It is common knowledge that it is now the practice in civilized countries to require tests for color blindness in individuals whose work is in connection with common carriers or in the armed forces.

About 3 per cent of males are color blind, while among women the proportion is much smaller, probably less than 1 per cent. It is usually congenital. It may exist in different degrees of completeness, from a total loss of color vision (achromatic vision) to a simple feebleness of color sense.

Wilmer and Berens[1] as early as 1918 investigated the effect of hypoxia on color sensitivity. They could find no change at altitude. Some Russian workers,[2] on the other hand, in 1935 found at altitude that retinal sensitivity to red, green and blue light was somewhat decreased. They concluded that cone vision was affected to a greater extent than rod vision. McDonald and Adler,[3] however, showed that both rod and cone vision were equally affected by oxygen deprivation.

Velhagen,[4] in 1935, reported that many people who have apparently normal color vision at sea level suffer a loss of this function at altitude. He held also that slight anomalies in color vision became accentuated under conditions of oxygen want, and further that one form of congenital anomaly may be converted into another. He found these changes at approximately 10,000 feet.

The work of Velhagen a year or two later was challenged by Schmidt,[5] who contended that if a subject was not color blind at sea level, he would not become so during oxygen want. He felt further that at altitude there was no conversion of one form of color blindness to that of another. He did agree, however, with Velhagen that if color blindness was normally present, it

would be increased by hypoxia. He felt, too, as did Velhagen, that these changes probably occurred at approximately 10,000 feet.

The above findings may not be of much practical significance today since airplanes are equipped with pressurized cabins. Pilots who fly aircraft not so equipped are instructed to use oxygen masks above a certain altitude. But there are still many circumstances in which accurate detection of colors is of importance: traffic lights, color coded wires, and electronic parts, matching fabrics, and still others. Many of these may be encountered at altitudes high enough to cause significant degrees of hypoxia.

1. Wilmer, W. H., and Berens, C., J.A.M.A., 71, 1394, 1918.
2. Vishnevskiy, N. A., and Tsyrlin, B. A., J. Aviation Med. (abstract), 7, 55, 1936.
3. McDonald R., and Adler, F. H., Arch. Ophth., 22, 980, 1939.
4. Velhagen, K., Jr., Arch. f. Augenh., 109, 40, 1935.
5. Schmidt, I., Luftfahrtmed., 2, 55, 1937.

TV DEBATES IN HUNTINGTON

Two Huntington physicians, Drs. James S. Klumpp and Walter R. Wilkinson, participated in a recent series of television debates with area labor union leaders on the question, "Should Medical Care for the Aged be Placed Under Social Security?" The debates were televised by WHTN-TV in Huntington on April 6 and June 1.

The following is the summary which was presented by Doctor Klumpp at the conclusion of the second telecast:

"In this series of two telecasts you have had the opportunity of hearing and seeing two representatives of those groups, which for many years have advocated the development of a compulsory health program, under strict federal control, for every man, woman and child in America. At this time they are confining their efforts to one segment of our senior population, in full knowledge that success in this legislative action will serve as an entering wedge in the effort to force such coverage on all citizens.

"You have also heard two physicians, who represent the medical profession in this county, express complete opposition to such a program which could eventually destroy the vital and intimate relationship which must exist between patient and physician if we are to retain the democratic American concept of the basic freedoms.

"The gentlemen who have spoken as proponents of the Kennedy proposals are not in a position to express any personal feelings they might have, but in their status as officials at the local level, they are obligated to express the dictates handed down by their superiors, who have allegedly shown strong political and selfish bias in their speech and actions regarding similar matters.

"The two physicians on this panel, although they represent some 175 medical men in this community, one of whom, no doubt, is your family physician, have neither been given orders nor instructions by their colleagues as to what they should say. Perhaps all our fellow physicians do not agree completely with our expressed opinions, but in the medical profession we still have the privilege of individual opinion, based upon the concept that our primary obligations are to those we serve.

"We are opposed to the Kennedy proposal, or to any other plan which (1) would grant privileges in the form of medical or any other service to any person of adequate means, unless that person assumes his fair share of the cost of such service; (2) we are strongly opposed to the compulsory inclusion, in such a program, of those senior citizens who neither need nor desire such help; and (3) we are opposed to the exclusion of some 4.5 million senior citizens who have not had the benefits of social security coverage, and whose economic status in many cases is far below that of the favored group.

"We favor and urge your support of legislation now in effect in the State of West Virginia, which is admittedly not yet perfect, but which by time and experience can be brought to a mature and satisfactory state of operation which will provide adequate medical care to those worthy senior citizens who need and request same.

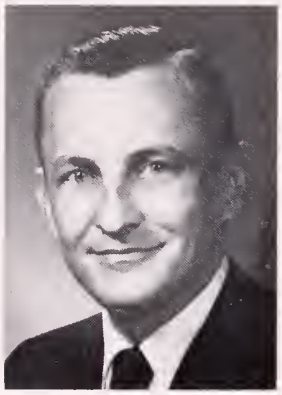
"In closing, let me remind you that in the presence of, and despite unwarranted criticism, we physicians do not and have never claimed perfection. We are human beings, just as you are; we have been blessed with special training for your benefits; we sometimes make mistakes—and so do our patients, but as a whole we are dedicated to those principles which will benefit mankind. In the future, as in the past, the medical profession pledges that no worthy person, regardless of his color, religion or economic status, will ever be deprived of adequate medical care, whether such care is rendered as a humanitarian courtesy to those without any means, to those citizens on the Public Assistance rolls, or to those whose financial status prevents them from assuming the cost of needed medical care."

GENERAL NEWS

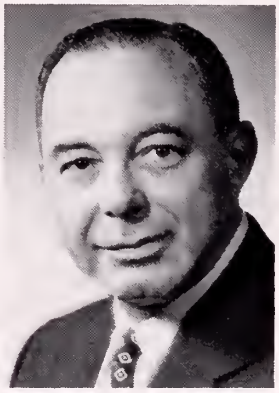
Program Completed for Annual Meeting At The Greenbrier, Aug. 24-26

The Program Committee has announced that plans have been completed for the three general scientific sessions which will be held during the 94th Annual Meeting of the West Virginia State Medical Association at The Greenbrier in White Sulphur Springs, August 24-26.

Dr. Halvard Wanger of Shepherdstown, Chairman of the Program Committee, said that Dr. R. H. Flocks of



Ivan L. Bennett, Jr., M. D.



R. H. Flocks, M. D.

Iowa City, Iowa, and Dr. Ivan L. Bennett, Jr., of Baltimore, have been added to the list of prominent physicians and surgeons who have accepted invitations to present papers during the three-day meeting.

Doctor Flocks, who is Professor and Head of the Department of Urology at the State University of Iowa College of Medicine, will appear as a speaker at the first general scientific session on Thursday morning, August 24. His subject will be "Prostatism."

He was born in New York City and received his M. D. degree from the Johns Hopkins University School of Medicine in 1930. He served as a Resident House Officer at Johns Hopkins Hospital, 1930-31, and also served a residency at University Hospitals in Iowa City, 1931-34.

Doctor Flocks was named an Associate in Urology at the State University of Iowa College of Medicine in 1935; Assistant Professor, 1937-39; Associate Professor, 1939-47; and Professor, 1947-49. He was named Head of the Department of Urology and Chief Urologist at University Hospitals in 1949.

He is a Diplomate of the American Board of Urology and a member of the American College of Surgeons, American Urological Association, Iowa State Medical Society, and the American Medical Association.

Doctor Flocks served as Secretary of the Section on Urology of the AMA, 1953-55, and as Chairman in 1956. He is a past president of the North Central Section of the American Urological Association and is a member of the AMA Residency Review Committee. He is also a member of the Board of Governors of the American College of Surgeons.

Ivan L. Bennett, Jr., M. D.

Dr. Ivan L. Bennett, Jr., who is Baxley Professor of Pathology and Director of the Department of Pathology at the Johns Hopkins University School of Medicine, will appear as a speaker during the third general scientific session on Saturday morning, August 26. His subject will be "Resistant Infections."

He is a native of Washington, D. C., and received his M. D. degree from Emory University School of Medicine in 1946. He interned at Grady Hospital in Atlanta, Georgia, 1946-47, and served residencies at the Naval Medical Research Institute, Johns Hopkins Hospital, Duke University Hospital and Grady Hospital, 1947-52.

He served as Assistant Professor of Medicine at Yale University School of Medicine, 1952-54, and accepted appointment as Associate Professor of Medicine at Johns Hopkins University School of Medicine in 1954. He was appointed Professor of Medicine at Johns Hopkins in 1957 and in 1958 was named Baxley Professor of Pathology. He also serves as Pathologist-in-Chief at Johns Hopkins Hospital.

Doctor Bennett is a Diplomate of the American Board of Internal Medicine and a Fellow of the New York Academy of Sciences and American College of Physicians. He is a past president of the American Federation for Clinical Research and is a member of the American Association for the Advancement of Science.

He is also a member of the Baltimore City Medical Society, Medical and Chirurgical Faculty of Maryland and the American Medical Association.

First General Session

The Program Committee announced previously that Governor W. W. Barron will be among the honor guests at the meeting and will present an address at the opening of the first general session on Thursday morning, August 24.

The other speakers and their subjects at the first general session will be as follows:

Edward L. Compere, M. D., Professor and Head of the Department of Orthopedic Surgery, Northwestern

University School of Medicine, Chicago, Illinois. Subject: "Helpful Hints to the Doctor in General Practice."

Rubin H. Flocks, M. D., Professor and Head of the Department of Urology, State University of Iowa College of Medicine, Iowa City, Iowa. Subject: "Prostatism."

Philip Thorek, M. D., Clinical Associate Professor of Surgery, University of Illinois College of Medicine, Chicago. Subject: "Diseases of the Esophagus in General Practice."

Second General Session

The second general session will be held on Friday morning, August 25. The speakers and their subjects will be as follows:

Karl Menninger, M. D., Dean of the Menninger School of Psychiatry, Topeka, Kansas. Subject: "Major Psychiatry and Minor Psychiatry."

Henry T. Ricketts, M. D., Professor of Medicine, University of Chicago School of Medicine, Chicago. Subject: "Types of Diabetes and Standards of Control."

Edward H. Rynearson, M. D., Chairman of the Sections on Metabolic Diseases at the Mayo Clinic and Professor of Medicine at the Mayo Foundation for Medical Education and Research, Medical Graduate School, University of Minnesota. Subject: "Use and Abuse of Hormones."

Third General Session

The third general session will be held on Saturday morning, August 26, and the following program presented:

Ivan L. Bennett, M. D., Baxley Professor of Pathology and Director of the Department of Pathology, The Johns Hopkins School of Medicine, Baltimore. Subject: "Resistant Infections."

Thaddeus L. Montgomery, M. D., Professor and Head of the Department of Obstetrics and Gynecology, Jefferson Medical College of Philadelphia. Subject: "Labor is for the Baby."

Waldo E. Nelson, M. D., Professor and Head of the Department of Pediatrics, Temple University School of Medicine, Philadelphia. Subject: "Infections in the Neonatal Period."

Doctor Wanger and the other two members of the Program Committee, Drs. Thomas H. McGavack of Martinsburg and Hu C. Myers of Philippi, will serve as moderators and will introduce the speakers at the morning sessions.

Several of the speakers have accepted invitations to present papers before afternoon meetings of the Association's sections and affiliated societies and associations.

Honor Guests on Program

In addition to an address by Governor Barron, Doctor Wanger also announced that Dr. Leonard W. Larson of Bismarck, North Dakota, President of the American Medical Association, will attend the meeting and speak before the second session of the House of Delegates on Saturday afternoon, August 26.

Dr. John W. Hash of Charleston, President of the State Medical Association, will deliver his presidential address at the first session of the House of Delegates on Wednesday evening, August 23.

Entertainment Features

Entertainment features during the meeting will include a Cabaret Dance at the Casino on Friday evening, August 25, sponsored by the Woman's Auxiliary, and a cocktail party and reception honoring officers of the State Medical Association on Saturday evening, August 26.

The Auxiliary will also sponsor a luncheon and style show in the Crystal Dining Room on Friday, August 25.

Heavy Advance Registration

The number of reservations for rooms at The Greenbrier during the Annual Meeting in August has already passed the 450 mark.

It is anticipated that more than 800 persons, including physicians, their wives, exhibitors and guests will be in attendance. All physicians who plan to attend the meeting are urged to make reservations as soon as possible. An early request will assure physicians, their families and guests of room accommodations.

The complete program for the meeting will appear in the August issue of *The West Virginia Medical Journal.*

No Convention Registration Fee

No registration fee will be assessed against either members or guests in connection with the 94th Annual Meeting of the West Virginia State Medical Association at The Greenbrier in White Sulphur Springs, August 24-26, 1961.

A cordial invitation to attend all sessions has been extended by the Program Committee to interns and physicians serving a residency in hospitals in West Virginia and adjacent states.

Requests for hotel accommodations should be mailed directly to the Reservation Manager, The Greenbrier, White Sulphur Springs.

Interstate Postgraduate Assembly In Cleveland, Nov. 13-16

The Annual Assembly of the Interstate Postgraduate Medical Association of North America will be held in Cleveland, Ohio, November 13-16, 1961. Co-sponsor will be the Ohio Academy of General Practice.

The meeting will feature lectures by distinguished physicians and surgeons, luncheon meetings and color TV provided through the cooperation of the Cleveland Clinic staff and produced by Smith, Kline and French Laboratories.

Scientific sessions will be held at the Cleveland Auditorium and headquarters will be at the Statler-Hilton Hotel. A special program has been arranged for wives of physicians attending the meeting.

Further information concerning the program and hotel accommodations may be obtained by writing to Edwin R. Schmidt, M. D., Secretary, Interstate Postgraduate Medical Association, Box 1109, Madison 1, Wisconsin.

Dr. Myer Bogarad Named 'GP of the Year'

Dr. Myer Bogarad of Weirton is West Virginia's "General Practitioner of the Year" for 1961. The selection was made by the Council of the West Virginia State Medical Association from a field of four nominees submitted by component societies. Final action was taken by the Council at the summer meeting in Charleston on June 11.

Doctor Bogarad, who is 58 years of age, was born in Providence, Rhode Island, on August 15, 1902. At the age of nine, his family moved to Steubenville, Ohio.

Myer Bogarad, M. D.

He was graduated from Western Reserve University and received his M.D. degree from the St. Louis University School of Medicine in 1928. He was selected as a member of Alpha Omega Alpha, honorary medical society.

Doctor Bogarad served an internship at St. Margaret Memorial Hospital in Pittsburgh, and then moved to Weirton where he has engaged in the practice of medicine for more than 30 years. During this time, he has been vitally interested and active in both medical and civic organizations.

He is a past president of the Hancock County Medical Society and the Fort Steuben Academy of Medicine. He also helped organize the Ohio Valley Chapter of the West Virginia Academy of General Practice.

He served for three years as treasurer of the West Virginia Chapter, AAGP, and was named president elect in 1958. He was installed as president at the annual meeting in Charleston in 1959.

He has served as a member of several key committees of the West Virginia State Medical Association, and he is also a member of the American Medical Association and the American College of Allergists.

Following completion of the new Weirton General Hospital, he was named the first president of the medical staff. During the past twenty years he has served as medical examiner and advisor of the Hancock County Draft Board.

His wife, Mildred, is active in civic and auxiliary activities and they have three sons: Irwin M., a practicing physician in Weirton; Martin, who practices law in Weirton and Steubenville, Ohio; and Allen, an instructor in the Department of Speech at Wittenburg University.

Doctor Bogarad's name has been certified to the American Medical Association in Chicago for consideration by its Board of Trustees in connection with the selection by that group of the national "General Practitioner of the Year."

Mrs. Mary E. Kessler Elected President Of State Medical Assistants

Mrs. Mary Ellen Kessler of Beckley was elected president of the West Virginia Association of Medical Assistants during a meeting of that organization held in Parkersburg, May 20-21. Other new officers are as follows:

Mrs. Noble Hicks of St. Albans, president elect; Mrs. Wayne Higginbotham of South Charleston, vice president; Mrs. Dymple Halstead of Beckley, secretary; and Miss Peggy Skaggs of Charleston, treasurer.

Miss Eula Sesler of Charleston and Mesdames Kessler and Halstead were elected delegates to the national meeting which will be held in October at Reno, Nevada. The alternates are Mrs. Noble Hicks of St. Albans and Mrs. Leone Grow of Parkersburg.

Drs. Kenneth G. MacDonald of Charleston, M. Lawrence White, Jr. of Huntington, and Richard G. Starr of Beckley were named advisors to the organization.

Guest speakers during the two day meeting included Dr. Charles L. Goodhand of Parkersburg, chairman of the Public Service Committee of the West Virginia State Medical Association, and Dr. W. E. Gilmore, President of the Parkersburg Academy of Medicine.

Medical Meetings, 1961

The following is a partial list of national, state and district medical meetings scheduled for 1961:

July 9—Obstetrical Seminar, Moundsville
July 10-12—Medical Licensing Board, Charleston.
July 12-13—Rocky Mountain Cancer Conference, Denver, Colo.
July 23-26—W. Va. Dental Assn., White Sulphur Springs.
Aug. 24-26—W. Va. State Medical Association, The Greenbrier, White Sulphur Springs.
Sept. 15—W. Va. Heart Association, Parkersburg.
Oct. 2-6—Am. Coll. Surgeons, Chicago.
Oct. 5—Rural Health Conference, Jackson's Mill.
Oct. 6-7—Cong. on Medical Quackery, Washington, D. C.
Oct. 18—W. Va. St. Nurses Assn., Clarksburg.
Oct. 19-21—W. Va. Hospital Assn., Morgantown.
Oct. 23-24—American Cancer Society, New York City.
Oct. 27-29—PG Institute, Martinsburg.
Nov. 6-9—Southern Medical Assn., Dallas, Texas.
Nov. 11—Pediatric Conference, WVU School of Medicine, Morgantown.
Nov. 13-16—Interstate PG Assembly, Cleveland.
Nov. 13-17—American PH Assn., Detroit, Mich.
Nov. 17-21—National Society for Crippled Children, Denver.
Nov. 28-Dec. 1—AMA Clinical Meeting, Denver.

Essay Contest for Residents

An essay contest for residents of approved hospitals in the southeastern states has been announced by the Southeastern Surgical Congress. The winner will receive a cash award and an all-expense paid trip to the annual meeting of the Congress in Louisville, Kentucky, March 5-8, 1962.

Papers must be submitted prior to December 1, 1961, to Ira A. Ferguson, M. D., 340 Boulevard, N. E., Atlanta 12, Georgia.

State Medical Association Lists Names of New Members

The following is a list by component societies of new members of the West Virginia State Medical Association elected since January 1, 1961:

Boone

Craig, Harry L. ..... Whitesville

Cabell

Allen, Albert L. ..... Huntington

Fayette

Duff, W. Rex ..... Montgomery
Lee, Chuan H. ..... "

Greenbrier Valley

Guy, George H. ..... Union

Hancock

Bogarad, Irwin M. ..... Weirton

Kanawha

Deardorff, W. Alva ..... Charleston
Huli, Ernest Q. ..... South Charleston
Hampton, Florine K. ..... Charleston

Marshall

Pickett, David L. ..... Moundsville

Mason

Slack, Richard L. ..... Pt. Pleasant

McDowell

Gale, Richard O. ..... Welch
McCord, Charles F. ..... "

Mercer

Flynn, Charles S. ..... Bluefield

Monongalia

Trotter, Robert R. ..... Morgantown

Ohio

Caruso, M. J. ..... Wheeling
Fisher, Albert J. ..... "
McCuskey, Bradford ..... "
Pavlick, Theodore J. ..... "
Tampoya, P. C. ..... "

Parkersburg Academy

Auvil, D. Keith ..... Parkersburg
Auvil, Loretto R. ..... "

Preston

Evans, James H., Jr. ..... Oakland, Md.

Raleigh

Daniel, Charles R. ..... Drexel Hill, Pa.
Mahan, Thomas K. ..... Beckley
Stanley, Joe P. ..... "

Wyoming

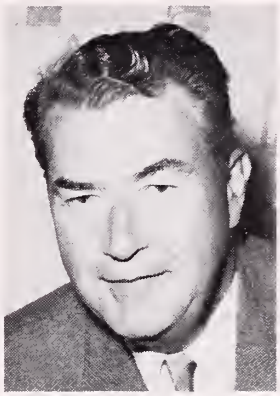
Oceretko, Arkadij ..... Mullens
Santa Rita, Samuel D. ..... "

Relocations

Dr. Maxwell H. Bloomberg of Elkins has moved to New Britain, Connecticut, where he will continue the practice of his specialty of orthopedic surgery. His address in New Britain is Cedar Lake Medical Centre, 73 Cedar Street.

Dr. Charles A. Hoffman Elected Treasurer of AUA

Dr. Charles A. Hoffman of Huntington was elected treasurer of the American Urological Association during the 56th Annual Meeting of that organization which was held at the Biltmore Hotel in Los Angeles, California, May 22-26. He succeeds Dr. Grayson Carroll of St. Louis, Missouri, who was named president elect.



Charles A. Hoffman, M. D.

Doctor Hoffman has been active for many years in the AUA and has served as Chairman of the Public Relations Committee during the past three years. He is a past president of the Mid-Atlantic Section of the AUA.

He is a past president of the West Virginia State Medical Association and is currently serving as one of the two state delegates to the American Medical Association. He is also Chairman of the Insurance Committee of the State Medical Association.

Confederate Medical Exhibit In Richmond, Virginia

The Confederate Medical Exhibit, sponsored jointly by the Virginia Civil War Commission and the Richmond Academy of Medicine, will be on display in the Academy's headquarters building in that city during the summer months.

Richmond, with a population of only 40,000 in 1861, became the medical center of the South and several hundred thousand ill and wounded men from both armies were treated in numerous hospitals which filled the city and spread out into the suburbs.

All aspects of confederate medical care are depicted by photographs, models, reports, charts, surgical equipment and wartime books. The fatal wounding of Generals Stuart and Stonewall Jackson and General Lee's heart condition are reviewed in the light of present-day knowledge.

West Virginia physicians and their families have been extended a cordial invitation to visit the exhibit this summer.

PG Course on 'Industrial Chest Diseases'

The American College of Chest Physicians will sponsor a postgraduate course on "Industrial Chest Diseases" at the Warwick Hotel in Philadelphia, September 25-29.

Registration fee for members will be $75, and $100 for non-members. Further information may be obtained by writing to ACCP, 112 E. Chestnut Street, Chicago 11, Illinois.

Doctor Connolly Installed as President Of W. Va. Chapter, AAGP

Dr. Randall Connolly of Vienna was installed as President of the West Virginia Chapter of the American Academy of General Practice during the Ninth Annual Scientific Assembly which was held at the Civic Center in Charleston, May 19-21.

Doctor Connolly succeeds Dr. J. Keith Pickens of Clarksburg, who will serve as Chairman of the Board of Directors during the coming year.

Dr. Don S. Benson of Moundsville was named president elect and will assume his duties as president at the annual meeting in Charleston next May. He has served two terms as vice president of the Academy.

Other officers were elected as follows:

Dr. Liskie J. Moore of Huntington, vice president; Dr. Joseph A. Smith of Dunbar, secretary; and Dr. Peter A. Haley of Charleston, treasurer. Drs. James E. Spargo of Wheeling and C. Carl Tully of South Charleston were elected to three-year terms as members of the Board of Directors.

Dr. Randall Connolly, center, president of the West Virginia Chapter, AAGP, is shown with Dr. Halvard Wanger of Shepherdstown and Dr. Tracy N. Spencer, Jr., of South Charleston. Doctor Wanger served as chairman of the Program Committee and Doctor Spencer was in charge of local arrangements.

Dr. Carl B. Hall of Charleston, a past president, was elected to a two-year term as delegate to the Annual Scientific Assembly of the American Academy of General Practice. He succeeds Dr. Thomas H. Blake of St. Albans, who has served several terms.

Doctor Hall and Dr. Seigle W. Parks of Fairmont will represent the Academy at the national meeting in Las Vegas, Nevada, in April, 1962.

The New Academy President

Dr. Randall Connolly, the new president, is a native of Richardson, West Virginia, and was graduated from Ohio University. He received his M. D. degree from Washington University School of Medicine in St. Louis in 1941, and served an internship at St. Joseph's Hospital in Parkersburg, 1941-42.

Doctor Connolly served a term as secretary of the Academy and was named president elect at the annual meeting in 1960.

He is also a member of the Parkersburg Academy of Medicine, West Virginia State Medical Association and the American Medical Association.

Scientific Program

More than 250 physicians attended scientific sessions which were held during the three-day meeting at the Civic Center in Charleston. Doctor Connolly served as general chairman and the members of the Program Committee were Dr. Halvard Wanger of Shepherdstown, Chairman, and Drs. Richard E. Flood of Weirton and John L. Van Metre of Charles Town.

Dr. Tracy N. Spencer, Jr., of South Charleston was in charge of local arrangements, and Dr. Martha Jane Coyner of Harrisville served as chairman of the Scientific Exhibit Committee.

Trudeau Society Program

Doctor Pickens called the meeting to order officially on Friday afternoon, May 19. The invocation was given by the Reverend John S. Lyles of Dunbar and addresses of welcome were delivered by Dr. William B. Rossman of Charleston, president of the Kanawha Medical Society, and Mr. William H. Lively, Executive Assistant, West Virginia State Medical Association.

The scientific session that afternoon was devoted to a program sponsored by the West Virginia Trudeau Society. The moderator was Dr. Julius L. Williamson, Professor of Preventive Medicine at the University of Pennsylvania School of Medicine.

Twenty prominent physicians and surgeons appeared as guest speakers at the scientific sessions held during the meeting. The moderators, in addition to Doctor Williamson, were Drs. Peter A. Haley of Charleston, L. Dale Simmons of Clarksburg, Buford W. McNeer of Hinton and Richard C. Wallace of St. Albans.

Business Session

Doctor Pickens presented his presidential address at a session of the Academy's House of Delegates which was held at the Civic Center on Friday morning, May 19.

During the session, the House approved the establishment of a memorial fund to aid needy students at the West Virginia University School of Medicine. The fund will make available to needy students loans up to $200 a year, with $500 the maximum per recipient during the four-year period of medical training. The money is to be repaid within two years following graduation.

Doctor Pickens said the fund will serve as a memorial for gifts by Chapter members and will help worthy students who plan to enter the general practice of medicine.

He also said that the Academy hopes that the fund will grow and that it will be possible to underwrite full scholarships in the future.

The Academy also approved a proposal to establish chaplaincy programs in hospitals throughout the state. Dr. Tracy N. Spencer, Jr., of South Charleston, who

helped organize a chaplaincy program at Thomas Memorial Hospital in that city, was named chairman of the Project Committee.

It was also announced during the meeting that the Tenth Annual Scientific Assembly will be held in Charleston, May 25-27, 1962. Dr. Halvard Wanger was named chairman of the Program Committee and Dr. W. D. Crigger of South Charleston will be in charge of local arrangements.

George K. Eubanks Banquet Speaker

Mr. George K. Eubanks, Manager of radio station WETZ in New Martinsville, West Virginia, was the guest speaker at the banquet which was held at the Press Club in Charleston on Saturday evening. His subject was "The Fallacy of After-Dinner Speaking."

Dr. Seigle W. Parks served as toastmaster for the banquet which was preceded by a social hour. The Past President's pin was presented to Doctor Pickens by Dr. Myer Bogarad of Weirton, a past president of the Academy.

Entertainment for Wives

Mrs. John W. Hash of Charleston was in charge of the entertainment program for wives of physicians in attendance at the meeting.

A luncheon was held at the Berry Hills Country Club, at which time a demonstration of "Flower Arrangements in the Home" was presented by Mrs. V. R. Fast, nationally-accredited flower show judge and recipient of the Jackson-Perkins Sterling Bowl Award in 1960.

New Dean at Hahnemann

Dr. William F. Kellow, Associate Dean of the University of Illinois College of Medicine, has been named Dean of Hahnemann Medical College of Philadelphia. He assumed his new duties on July 1.

Doctor Kellow received his M. D. degree from Georgetown University School of Medicine in 1946 and has been on the faculty of the University of Illinois College of Medicine since 1954. He was named assistant dean in 1955 and associate dean in 1959.

Seminar on Obstetrics Planned In Moundsville on July 9

An "Obstetrical Seminar" will be conducted at the Elks Club in Moundsville on July 9. The one-day meeting will be sponsored jointly by the West Virginia Chapter of the American Academy of General Practice and the local Ohio Valley Chapter. The program will be underwritten by a grant from the Merck, Sharp and Dohme Postgraduate Program.

Speakers and their subjects for the morning session will be as follows:

"The Heart in the Pregnant Female."—Irwin Bogarad, M. D., Weirton, West Virginia.

"Blood in the Pregnant Female and Newborn."—Gary Eicher, M. D., Steubenville, Ohio.

Luncheon will be served from one to 2:30 o'clock at the Elks Club, and the following program will be presented at the afternoon session:

"The Normal Pregnancy that is Abnormal."—John Metcalf, M. D., Steubenville, Ohio.

"The Newborn Baby."—Jacob Mervis, M. D., Steubenville, Ohio.

The speakers will participate in a panel discussion and a question and answer period at the conclusion of the formal program.

Congress on Medical Quackery

A Congress on Medical Quackery will be held at the Sheraton-Park Hotel in Washington, D. C., October 6-7. The two-day meeting will be sponsored jointly by the American Medical Association and the Federal Food and Drug Administration.

The AMA for many years has maintained a formal program combating medical quackery as the chief function of the Department of Investigation, now a part of the Legal and Socio-Economic Division. The FDA has also been active in the product aspect of this problem, as have such other Federal agencies as the Post Office Department and the Federal Trade Commission.

Guest speakers at the Ninth Annual Scientific Assembly of the West Virginia Chapter, AAGP, included, left to right, Drs. Perry S. MacNeal of Philadelphia, Jack D. Myers of Pittsburgh, Thomas H. McGavack of Martinsburg and Aaron Arkin of Chicago. In the other photo, Dr. Randall Connolly, president of the Chapter, is shown with the president elect, Dr. Don S. Benson of Moundsville.

Twenty-Six State Students Graduate from MCV

Twenty-six students from West Virginia received M. D. degrees from the Medical College of Virginia during the 124th Commencement Exercises held at The Mosque, in Richmond, on June 4, 1961. Twenty-one of the students were graduates of the two-year School of Medicine at West Virginia University.

The following is a list of West Virginia graduates with hospital appointments for 1961-62:

Curry, Virgil Lee, Marlinton
Medical College of Virginia Hospitals
Richmond, Virginia

Curry, William Lake, Barboursville
Medical College of Virginia Hospitals
Richmond, Virginia

Dawson, Robert Lloyd, Tampa, Florida
Mound Park Hospital
St. Petersburg, Florida

Dawson, Wallace Lantz, Kingwood
Mound Park Hospital
St. Petersburg, Florida

Dawson, William Sidney, Logan
Mound Park Hospital
St. Petersburg, Florida

Fidler, Robert Young, Belle
Medical College of Virginia Hospitals
Richmond, Virginia

Harman, John Simon, Harman
Medical College of Virginia Hospitals
Richmond, Virginia

Hicks, Donald Lee, Ronceverte
Veterans Administration Hospital
Oklahoma City, Oklahoma

Janicki, Thomas Joseph, Barrackville
Memorial Hospital
Charleston, West Virginia

Johnson, William Waldo, Charleston
U. S. Naval Hospital
Portsmouth, Virginia

Kennedy, Harry Greene, Jr., Charleston
Mercy Hospital
Springfield, Ohio

Maiolo, Joseph Anthony, Morgantown
Lewis-Gale Hospital
Roanoke, Virginia

Maxey, Stephen Stone, Charleston
Memorial Hospital
Charleston, West Virginia

Mazzocco, Victor Eugene, Morgantown
Memorial Hospital
Charleston, West Virginia

Meador, James Carr, Jr., Charleston
U. S. Naval Hospital
Philadelphia, Pennsylvania

Miller, James Barry, Gauley Bridge
Mercy Hospital
Springfield, Ohio

Pasquale, Samuel Anthony, Williamson
Mercy Hospital
Springfield, Ohio

Poole, Thomas Robert, Glasgow
Memorial Hospital
Charleston, West Virginia

Power, Curtis Garland, Jr., Martinsburg
U. S. Naval Hospital
Philadelphia, Pennsylvania

Repaire, John Richard, Montgomery
Memorial Hospital
Charleston, West Virginia

Repass, James Caldwell, Lumberport
George Washington Hospital
Washington, D. C.

Spiggle, Wayne Campbell, Jr., Davis
Memorial Hospital
Charleston, West Virginia

Tolley, Gary Maurice, Huntington
Memorial Hospital
Charleston, West Virginia

Wilkinson, Carolyn Jane, Clarksburg
Jefferson Hospital
Philadelphia, Pennsylvania

Wotring, James William, Kingwood
Medical College of Virginia Hospitals
Richmond, Virginia

Yurko, Anthony Andrew, Jr., Weirton
Roanoke Memorial Hospital
Roanoke, Virginia

Nursing Fellowship Program

The National League for Nursing has announced the continuation of the Nursing Fellowship Program which has awarded more than 174 fellowships to nurses since the establishment of the program in 1955.

The purpose of the NLN Fellowship Program is to provide funds to subsidize programs of advanced study for nurses of proven ability who show promise of making a highly distinctive contribution to nursing. Since 1955, fellowships have been awarded to 140 candidates for the doctor's degree and 34 to candidates for the master's degree.

Grants range from $2,500 to $5,500 or somewhat higher in exceptional circumstances. Applications for fellowships may be obtained by writing the National League for Nursing, 10 Columbus Circle, New York 19, New York.

GP Symposium in Roanoke on July 22

The second annual Summer Symposium of the Blue Ridge Chapter of the Virginia Academy of General Practice will be held at the Hotel Roanoke, in Roanoke on Saturday, July 22.

Six prominent physicians have accepted invitations to appear as guest speakers and they will report on advances in the diagnosis and treatment of both mental depression and inflammatory disorders.

Dr. John Wyatt Davis, Jr., of Lynchburg, Virginia, president of the Chapter, will preside at the one-day meeting. There is no registration fee and wives of physicians are encouraged to attend. There will be a social hour at the conclusion of the scientific program.

Series of Regional Meetings Conducted by Auxiliary

Regional meetings of the Woman's Auxiliary to the West Virginia State Medical Association were held during the last week of April. The sessions were held in Wheeling, Parkersburg and Charleston, and were conducted as schools of instruction for newly-elected county officers and committee chairmen.

Mrs. Clark K. Sleeth of Morgantown, President of the State Auxiliary, said that the meetings were well attended and that representatives from various component auxiliaries enjoyed the exchange of ideas and information.

In addition to the four vice presidents who conducted the meetings in their capacity as regional directors, the following state officers and committee chairmen participated in the sessions:

Mrs. Sleeth of Morgantown, President; Mrs. Vernon L. Dyer of Petersburg, president elect; Mrs. Andrew J. Weaver of Clarksburg, treasurer; Mrs. L. Dale Simmons of Clarksburg, legislation; Mrs. A. C. Chandler of Charleston, program; and Mrs. William A. Thornhill, Jr., of Charleston, By-Laws and Handbook.

A combined meeting of the North Central and Eastern regions was held at the Wheeling Country Club in that city on April 25. Mrs. George A. Curry of Morgantown and Mrs. Earl S. Phillips of Wheeling presided at the meeting.

Representatives from Ohio, Hancock, Harrison and Monongalia counties attended the meeting. At the conclusion of the morning session, participants in the workshop were guests of the members of the Ohio County Auxiliary at a luncheon. Mr. Samuel Nazarro, assistant administrator of Wheeling Hospital, was the guest speaker and he presented an interesting talk on the rising costs of hospital care.

On Monday evening, April 24, Dr. and Mrs. Earl S. Phillips entertained guests who had arrived early at a dinner in Wilson Lodge. A color film, "This is Your Hospital," depicting the services and activities of the Ohio Valley General Hospital, was shown to the group by Mr. Robert Mullins, a member of the Hospital's administrative staff.

Meeting in Parkersburg

The second regional meeting was held at the Chancellor Hotel in Parkersburg on April 26, with members of the Woman's Auxiliary to the Parkersburg Academy of Medicine as hostess group. The business meeting was preceded by a continental breakfast.

Mrs. C. Stafford Clay of Huntington presided at the meeting and representatives from Cabell and Wood counties were in attendance. A luncheon with members of the local auxiliary followed the business meeting.

Final Regional Meeting

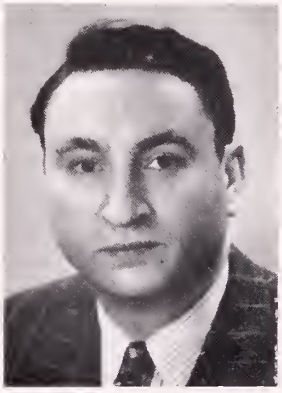
The final meeting in the series of workshop sessions was held at the home of Dr. and Mrs. Pat A. Tuckwiller in Charleston on April 27. Mrs. Tuckwiller presided at the meeting and a question and answer period was held prior to discussions on program planning, medical legislation and other Auxiliary projects.

At the conclusion of the business session, luncheon was served by Mrs. Tuckwiller. Officers of auxiliaries in Mercer, Raleigh, Fayette and Kanawha counties attended the meeting.

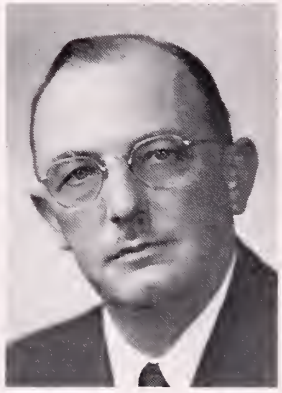
Officers and committee chairmen from four component auxiliaries attended a regional meeting which was held in Wheeling on April 25. Left to right, Mrs. Vernon L. Dyer of Petersburg, president elect of the State Auxiliary; Mrs. Clark K. Sleeth of Morgantown, president; Mrs. George A. Curry of Morgantown, second vice president; and Mrs. Earl S. Phillips of Wheeling, fourth vice president.

Prominent Physicians To Appear On Allergy Program

Three prominent physicians in the field of allergy have accepted invitations to appear as guest speakers before an open meeting of the West Virginia State Society of Allergy, which will be held during the 94th Annual Meeting of the West Virginia State Medical



Philip Blank, M. D.



Homer E. Prince, M. D

Association at The Greenbrier in White Sulphur Springs, August 24-26.

Dr. Merle S. Scherr of Charleston, secretary of the Society, announced that Dr. Homer E. Prince of Crockett, Texas, Dr. Philip Blank of Pittsburgh, and Dr. Jose Quintero of San Juan, Puerto Rico, will present papers at the meeting which will be held on Thursday afternoon, August 24.

Doctor Prince, who is Emeritus Clinical Professor of Medicine at the Baylor University College of Medicine, will present a paper on "A Practical Approach to Mold Allergy."

He is recognized as an authority in the field of mold allergy and is a former President of the American College of Allergists.

The second speaker will be Dr. Philip Blank of Pittsburgh, who will present a paper on "Atopic Dermatitis."

Doctor Blank, who has appeared as a speaker at past meetings of the Society, is Clinical Instructor in Allergy at the University of Pittsburgh School of Medicine and Director of Allergy of the Brentwood Medical Group in that city.

The final speaker will be Dr. Jose Quintero of San Juan, Puerto Rico. His subject will be announced at a later date.

Doctor Quintero is the author of numerous scientific articles and is recognized as an authority on mold allergy in Central and South America.

Doctor Scherr will serve as moderator of a panel discussion following the presentation of papers. He said that ample time will be allotted for a question and answer period.

Dr. Marshall J. Carper of Charleston is president of the Society, and Dr. M. D. Reiter of Wheeling, vice president.

New Association Members

Dr. James H. Evans, Jr., 108 Pennington Street, Oakland, Maryland (Preston). Doctor Evans, a native of New Holland, Pennsylvania, received his M. D. degree from the Jefferson Medical College in Philadelphia in 1948, and interned at Lancaster General Hospital in Lancaster, Pennsylvania, 1948-49. He served a residency at the VA Hospital in Philadelphia, 1956-59, and was licensed to practice in West Virginia in 1961. He practices his specialty of radiology in Oakland and Kingwood.

* * * *

Dr. Ernest Q. Hull, Carbide Chemicals Corporation, South Charleston (Kanawha). Doctor Hull was born at Bartow, West Virginia and received A.B. and B.S. degrees from West Virginia University. He received his M.D. degree from the Northwestern University School of Medicine in 1948 and interned at the Cincinnati General Hospital. He was licensed to practice in West Virginia in 1949 and was previously located at Grafton, North Carolina. His specialty is industrial medicine.

* * * *

Dr. Theodore J. Pavlick, The Wheeling Clinic, Wheeling (Ohio). Doctor Pavlick, a native of Pittsburgh, was graduated from Ohio University and received his M.D. degree from the University of Cincinnati College of Medicine in 1956. He interned at Detroit Receiving Hospital, 1956-57, and served a residency there, 1957-60. His specialty is ophthalmology.

* * * *

Dr. Samir Shabb, 308 33rd Street, S. E., Charleston (Kanawha). Doctor Shabb was born in Sidon, Lebanon and received his M.D. degree from the American University of Beirut in 1953. He interned in Beirut, 1953-54, and served a residency at Charleston Memorial Hospital, 1956-59. He was licensed to practice in West Virginia in 1960 and his specialty is general surgery.

Auto Emblems Available

A supply of auto emblems, bearing the insignia of the West Virginia State Medical Association, is kept on hand at all times at the headquarters offices in Charleston. The price of each emblem is $3.25 postpaid.

Doctor Hash Represents State At Meeting in Washington

Dr. John W. Hash of Charleston, president of the West Virginia State Medical Association, represented West Virginia at a small "White House" Conference which was held in Washington, D. C., June 15-16.

The conference was called by Abraham Ribicoff, Secretary of Health, Education and Welfare, for the purpose of implementing the recommendations of the White House Conference on Aging which was held in Washington in January.

Doctor Hash was appointed as the state representative to the meeting by Governor W. W. Barron.

Miss Gertrude Humphreys Honored By Public Health Association

Miss Gertrude Humphreys of Morgantown was honored recently by the West Virginia Public Health Association for "outstanding and meritorious achievement in the field of public health in West Virginia."

Miss Humphreys, who is State Leader, Home Demonstration Work, West Virginia University Extension Service, received the "Citizen Award" at a banquet held in connection with the 37th annual meeting of the Association at the Hotel Waldo in Clarksburg, May 10-12.

Miss Gertrude Humphreys

Presentation of the award was made by Dr. L. A. Dickerson, Director of the Division of Disease Control, State Department of Health.

Miss Humphreys has served for several years as a member of the Advisory Committee to the State Medical Association's Rural Health Committee, a group which is responsible for arranging the program for the annual Rural Health Conference at Jackson's Mill. She also is a member of the Advisory Committee to the AMA Council on Rural Health.

The following is the citation which was read in connection with the presentation of the award to Miss Humphreys:

> "Miss Humphreys has been a pioneer in the field of rural health in West Virginia. Working through the Farm Women's Clubs and other farm organizations, she has brought an awareness of health and nutrition to a vast number of rural citizens. She has written, or had written quite a number of pamphlets which are distributed through the Agricultural Extension Service at West Virginia University dealing with health problems and health education.
>
> "In addition, Miss Humphreys has worked faithfully in the establishment of the annual State Rural Health Conference sponsored by the West Virginia State Medical Association. This Conference is held each fall at Jackson's Mill and is attended by farm representatives from all over West Virginia.
>
> "Miss Humphreys is recognized nationally for her work in this field. She is a member of the Advisory Committee to the Council on Rural Health of the American Medical Association and has taken part in regional, state and national planning committees. She has also been a member of planning committees to integrate the work of health and nutrition, in committees working on health care of the aging. We can be thankful that she chose West Virginia in which to perform her good works in public health and nutrition."

The Association also presented a "Merit Award" to Mr. Ellis S. Tisdale of Washington, D. C., for his contributions to the field of public health in the State.

Mr. Tisdale, who served for many years as a sanitary engineer with the State Department of Health, is now serving as Executive Director of the Interstate Commission on the Potomac River Basin, Washington, D. C.

He was a member of the original committee which formulated the United States Public Health Service Milk Ordinance and Code. During his service with the State Health Department, he was instrumental in pointing out the need for complete water supply treatment and the installation of treatment facilities.

The awards are presented annually by the Association to a layman and a professional person for outstanding work in the field of public health in West Virginia.

New Officers Elected

Mrs. Eva B. Green of Huntington, a member of the staff of the Cabell-Huntington Health Department, was installed as president during the three-day meeting. She succeeds Dr. B. S. Brake, health officer of the Harrison-Clarksburg Health Department.

Dr. E. E. Myers of Philippi was named president elect; Mrs. Wanda V. Johnson of Charleston, vice president; and James Rosencrance of Charleston, treasurer.

Elected Members-at-Large to the Executive Council were Dr. N. Allen Dyer of Bluefield, Mr. Harry K. Gidley of South Charleston, and Mr. J. B. Baker of Clarksburg. Dr. L. A. Dickerson of Charleston was named as the Association's delegate to the American Public Health Association, and the alternate is Dr. Bruce H. Pollock of Huntington.

The executive secretary of the organization is Mrs. Katherine L. Brown of Charleston.

More than 250 persons attended this year's Conference. The theme for the meeting was "Health Mobilization—The Built-in Concept." It was announced that the 38th annual meeting of the Association will be held at the Hotel Prichard in Huntington, June 6-8, 1962.

Crippled Children's Soc. Meeting in Denver

The annual meeting of the National Society for Crippled Children and Adults will be held at the Hilton Hotel in Denver, Colorado, November 17-21, 1961. The program will feature reports of progress in research projects sponsored by the Easter Seal Research Foundation.

Further information concerning the program may be obtained by writing to the National Society for Crippled Children and Adults, 2023 West Ogden Avenue, Chicago 12, Illinois.

Doctor Annis Appointed to Editorial Post

Dr. Edward R. Annis of Miami, Florida, has been appointed Editor-at-Large of the magazine *Medical Economics*, according to a recent announcement by William Alan Richardson, editorial director.

Doctor Annis, who has delivered more than 3,000 talks on behalf of private medicine since 1938, will write a biweekly column for the publication. In recent months, he has participated in television debates with Senator Hubert H. Humphrey of Minnesota and Walter Reuther, president of the United Auto Workers'.

AMA Endorses Medicolegal Home-Study Course for Physicians

The Board of Trustees of the American Medical Association recently endorsed a joint project with the University of Chicago to prepare and present a home-study course entitled "Legal Problems in the Practice of Medicine."

The course will provide physicians with an opportunity to acquire knowledge of the principles and operation of American law as well as the interrelationships of law and medicine. The course is geared to the busy physician who seeks an understanding of the law as it affects him in his day-to-day work.

Aims of the course are to inform physicians about possible legal problems and procedures which might arise in their practice, to acquaint physicians with specific statutes and court decisions affecting and regulating the practice of medicine, and to assist the physician in his understanding of the roles of legislatures, administrative bodies, courts and attorneys in relation to medical practice.

Tuition for the course is $35 and texts and selected reading materials for use in the course are to be purchased by the physician. Assignments are to be completed and mailed to an instructor of the University of Chicago Home-Study Department for evaluation and comment.

Further information concerning the course may be obtained by writing to the Home-Study Department, University of Chicago, 60th at Dorchester, Chicago 37, Illinois.

The M. D. and Disaster Preparedness

Did you know that one 10-megaton nuclear bomb "would destroy all multistory brick structures within a radius of 7 miles from ground zero? That well constructed wood frame houses within 9 miles would collapse? That the depth of the center would be 240 feet? Severe disabling burns could be expected by all persons within a radius of 9 miles?" (U. S. Government, Joint Committee Report on Biological and Environmental Effects of Nuclear War, 1959).

To appreciate the significance of this, we can restate it. If you were to place the center of a circle with a radius of 9 miles in downtown Boston, this circle would enclose not only Boston but also Winthrop, Saugus, Melrose, Malden, Medford, Everett, Arlington, Belmont, Lexington, Watertown, Somerville, Cambridge, Newton, Brookline, Needham Heights and Hull.

We have also read that the more "humane" weapons such as the nerve gases can kill off human beings in extremely large numbers, silently and effectively. The difference between these two deadly weapons of all-out war lies merely in the fact that in the second situation the corpses would be less mutilated—but death is death, no matter how the victim dies.—Massachusetts Physician.

14 Medical Technology Students Accepted at WVU

Dr. Clark K. Sleeth of Morgantown, Dean of the West Virginia University School of Medicine, announced recently that fourteen students have been accepted for entry into the Medical Technology program at the Medical Center.

All of the students have completed two years of college level work and will begin their final two years leading to a B. S. degree in medical technology this fall.

Members of the class are as follows:

Judith Ann Arnold, Kingwood; Kay Carol Arthur, Charleston; Peggy Ann Brown, Mary Katherine Guy, Anna Louise Lazzell and Karen Moffett Myer, Morgantown; Sandra Sue Fortney, Enterprise.

Karen Phyllis Butler and Phyllis Jean Yurik, Wheeling; Linda Lou Cumberledge, New Milton; Sue Carol Jones, Nitro; Connie Jeanne Null and Brenda Carol Todd, Weirton; and Gregory K. Rhodes, Bridgeport.

PG Course in Gastroenterology In Cleveland, Oct. 26-28

The American College of Gastroenterology has announced that its annual course in postgraduate gastroenterology will be presented at the Sheraton-Cleveland Hotel in Cleveland, Ohio, October 26-28, 1961.

The faculty for the course will be drawn from the medical schools in and around Cleveland. The subject matter to be covered in the course, from a medical as well as a surgical viewpoint, will be, essentially, the advances in diagnosis and treatment of gastrointestinal diseases. There will be comprehensive discussions of pancreatic disease, biliary tract disease, electrolytes and peptic ulcer.

There will be an "X-ray Classroom" on the last afternoon, presented by a panel of specialists who will answer questions and present instructional demonstrations.

Sessions will be held at the Cleveland Clinic and the Cleveland Academy of Medicine.

Further information concerning the course may be obtained by writing to American College of Gastroenterology, 33 West 60th Street, New York 23, N. Y.

ACS Clinical Congress in Chicago, Oct. 2-6

The 47th annual Clinical Congress of the American College of Surgeons will be held at the Conrad Hilton Hotel in Chicago, October 2-6, 1961.

More than 11,000 physicians from this country and abroad are expected to attend the five-day meeting, and approximately one thousand physicians will participate in the scientific program.

Further information concerning the program may be obtained by writing the American College of Surgeons, 40 East Erie Street, Chicago 11, Illinois.

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Varicose Veins and Stasis Problems*
(The General Physician's Interest and Potentialities)

Frederick B. Wagner, Jr., M. D.

Latest summaries of information about varicose veins are worthwhile because the condition is common and highly amenable to treatment. Far from being a dull and limited subject, the modern management of the disease requires detailed knowledge of venous anatomy, physiology and pathology, with clinical ramifications challenging the general practitioner, surgeon, obstetrician, peripheral vascular internist, geriatrist and radiologist. It is the purpose of this paper to present those aspects which involve the general physician and in which he may give advice or personally carry out the therapy.

From the clinical standpoint, there are three types of varicose veins of the lower extremities that the practitioner must differentiate. They are the primary, the telangiectatic and the secondary type. Each has a different etiology, a characteristic clinical picture, and a separate therapy. While all three will be described individually, it must be understood that some patients will have two or even all three types in combination. In addition, the special problems of varicose veins during pregnancy will be considered.

Primary Varicose Veins

Incidence.—Primary varicose veins are of clinical significance in at least 3 per cent of all individuals. They are absent during childhood and the severest cases make their appearance at adolescence. When they first appear after the age of 35, it usually is in a less severe form. It is a progressive disease, as a rule, and, except for the aggravating factor of pregnancy, would involve males and females about equally. Race, height and body weight do not affect the severity,[1] but obesity may tend to conceal the varices.

The Author

- **Frederick B. Wagner, Jr., M. D., Clinical Professor of Surgery, The Jefferson Medical College, Philadelphia, Pennsylvania.**

Etiology and Pathogenesis.—Over 80 per cent of patients will give a family history of primary varicose veins, and if blood relatives other than siblings are included, the rate is approximately 90 per cent. Not only may several members of the same family in succeeding generations have varicosities, but the pattern of the involved veins may be similar. Gross and microscopic studies[2,3] have indicated that absence of valves above the saphenofemoral junction, as well as absence of smooth muscle and elastic tissue in the vein wall opposite the valves (sinus wall), are the important hereditary factors. It is essential to understand that prolonged standing or occupational strain in themselves will not produce primary varicose veins in a perfectly normal individual. Such persons may develop tired legs and functional strain but spend a lifetime of hard work without developing a single varicosity. On the other hand, the patient with the marked hereditary predisposition will develop varicose veins despite every effort to forestall them. It is among patients in this group that prolonged standing or repeated pregnancies will accentuate the condition.

Although the hereditary defects in the veins are present at birth, the veins function normally during childhood because elasticity of veins and skin is greatest then; veins are growing in length,

*Presented before the Fifth Annual Potomac-Shenandoah Valley Postgraduate Institute at Martinsburg, October 21, 1960.
Submitted to the Publication Committee, November 7, 1960.

minimizing tortuosity; the diameter of veins is relatively smaller; hydrostatic pressure is less, since full height has not been attained; muscular movements are more active and prolonged periods of standing are exceptional. At adolescence, these inhibitory factors lessen and are supplanted by aggravating factors. Under the stress of increased hydrostatic pressure by standing or increased intra-abdominal pressure by straining, the vein dilates first at its point of constitutional weakness, namely, opposite the valve cusps (sinus wall). Eventually, the valve cusps no longer can meet in the midline and valvular incompetency begins. When this process starts at the saphenofemoral junction or other perforator vein sites, retrograde flow of blood from the deep veins into the superficial veins is initiated. The varicose veins present themselves within the subcutaneous tissue as a straight tubular hypertrophy, tortuous type, saccular type, or a combination of the two.

Pathophysiology of Stasis.—The ordinary patient with primary varicose veins has a normal deep venous system. The varicosis is limited to the superficial veins and to the perforating veins which connect them with the deep venous system. The pathologic process consists of dilatation of the superficial and perforating veins, which renders their valves functionally incompetent. This permits a reversal of the flow of blood which normally is from below upward and from superficial into deep veins through the perforator veins. When the patient stands, the blood now refluxes from above downward and from deep to superficial through the incompetent perforator veins. The increase in venous pressure is transmitted to the venous capillaries in which a state of hypertension is developed. Thus, stasis or decreased drainage of venous blood from the tissues ensues.

Stasis Complications.—Pigmentation is one of the earliest signs of venous stasis, and is due to rupture of the venous capillaries with intradermal deposit of iron pigment from the extravasated blood cells. It appears first in scattered focal areas about the malleoli and in the lower third of the leg, with later coalescence into prominent blotches.

Edema due to stasis in uncomplicated primary varicose veins is minimal or latent. It becomes manifest only upon prolonged standing. It is purely a phenomenon associated with capillary venous hypertension and represents the diminished ability of the tissue fluids to pass the venous capillary endothelium owing to the increased mechanical pressure within the lumen. The degree of edema should disappear after a night of rest. Moderate or severe edema which persists after a night's rest indicates deep venous involvement or lymphatic obstruction as well.

Fibrosis ensues only after prolonged untreated edema, and is due to growth of fibroblasts within the protein-rich interstitial fluid. The latter complication is manifested by a change from pitting edema to a brawny or leathery type, and usually is seen in cases of primary varicose veins combined with deep venous insufficiency.

Superficial thrombophlebitis is a chemical inflammation in the varicose veins following the coagulation of blood when the opposing forces to return flow produce complete stagnation. The clotted blood acts as a chemical irritant and sterile venitis and perivenitis ensue. In very unusual instances, probably when a minor break in the skin also is present, suppurative phlebitis with bacteria may follow.

Ulceration usually is due to a combination of stasis, trauma and infection. It is the most frequent and most distressing sequel of long-untreated varicose veins. The trauma may have been so trivial as to pass unnoticed or may follow any minor contusion about the ankle or shin area. With a break in the skin, bacteria quickly grow within the edematous tissues. The acute ulcer thus formed fails to heal and unless adequate active therapy is instituted, an indolent ulcer results. It is important to distinguish the purely traumatic ulcer from that associated with preexisting primary varicose veins. Some patients, possibly truly in ignorance, will try to claim that not only the ulcer but the varicose veins followed the trauma.

Cellulitis, secondary to invasion by hemolytic streptococci, may start in the edge of a neglected varicose ulcer. The onset is accompanied by a sudden increase in pain about the ulcer area, a zone of spreading reddish discoloration around the ulcer, and reddish streaks up the course of the lymph channels of the leg which drain the ulcer site. The inguinal lumph nodes become enlarged and tender. If the progress is not checked, systemic toxemia may ensue.

Stasis dermatitis is a nonspecific, often itchy, vesicular eruption which characteristically starts in the supramalleolar area, but which may spread over the dorsum of the foot, up the leg, and even beyond the limits of the actual stasis area. In some patients the dermatitis is due to fungus infection, although this may be difficult to prove by culture or microscopic examination. In still others it may be an allergic manifestation of a mycotic infection elsewhere in the body, such as the toes, groin, or fingernails. Finally, the

patient may have a primary skin lesion such as psoriasis which manifests itself locally and intensely in the area of stasis (Figure 1). In such an instance, the stasis is a contributory or aggravating rather than a primary factor.

Figure 1. Stasis dermatitis associated with fungus infection and psoriasis.

External rupture of a varicose vein in the lower third of the leg or ankle may occur owing to atrophy of the overlying skin. This may be spontaneous or from minor trauma. Sometimes the rupture is subcutaneous, with resultant ecchymosis and hematoma formation.

Taking the History.—It is important to take a careful history of the patient with varicose veins. The following are some of the pertinent questions one should ask:

What is the age of the patient? This is significant, since a young patient with marked varicose veins has many years ahead in which to develop complications. In addition, these patients must be kept fit for work. On the other hand, old age in itself is no contraindication to treatment.

What is the familial history? It is interesting to determine the incidence and severity of varicosis in other members of the family, and this may give some indication of the possible severity and rate of progression in the patient.

What is the occupational history of the patient? This is important, since long periods of standing aggravate the varicose veins of predisposed individuals. In some cases it may be necessary to advise a modification or change of occupation.

How long have the varicosities been present? In correlating the duration with the severity, one may obtain some idea of the rate of progression of the disease. Onset at adolescence usually denotes a more severe type.

Has there been any recent change? The onset of increased fatigability, heavy leg, swelling, pain or skin changes indicate progression to a more advanced stage, with potential or actual complications.

What symptoms are present? These vary from cosmetic offensiveness to tired leg, heavy leg, swelling, pain, or skin changes.

Did they appear following pregnancy? How many pregnancies have occurred? What effect did pregnancy have on the onset or progression of the disease?

Is there any past history of phlebitis? If so, try to determine whether it was in the varicose veins or the deep veins.

Has any previous therapy been employed? Question the patient as to the type and extent of previous therapy, as well as the results. Obtain information concerning any sclerosing agents used or local surgery performed.

What complications have existed (phlebitis, ulceration, bleeding, or skin changes)?

Is there any history of arterial insufficiency (intermittent claudication, leg cramps, cold feet)?

Is there any history of systemic disease (diabetes, arthritis, syphilis, cardiorenal disease)?

Physical Examination.—In addition to examining the lower extremities, it is essential to perform a general examination at the same time to look for associated or concomitant disease. The local examination should include inspection, palpation, percussion and, occasionally, auscultation.

Inspection should be carried out with the patient standing, so that the veins will be as prominent as possible. Both lower extremities should be entirely exposed even though symptoms exist in only one, since the asymptomatic extremity also is frequently involved. The examination is facilitated if the patient stands on a sturdy chair or platform and the physician is seated.

The anterior aspect of the extremities is examined first. Then the patient is rotated and the posterior aspect examined. A careful check should be made for latent or manifest complications such as edema, pigmentation, dermatitis, ulceration or phlebitis. Evidence of previous treatment such as ligation scars or injection sites should be noted. The type and anatomic distribution of the varicosities are then determined. A survey is made of the portions of the greater or lesser saphenous systems at fault, whether the involvement is segmental or diffuse, how much of each extremity is involved, the number and size of the varicosities and whether they are main trunks or tributaries.

Palpation determines the size, extent and tension of the varicose veins. It is even more important than inspection. It not only confirms the findings of inspection, but also discloses concealed varicosities, particularly in obese patients. Most important of all, palpation determines the degree of increased venous tension in the superficial circulation, which is the result of retrograde flow of blood from the deep veins through incompetent valves in the perforator veins. The clinical symptoms usually are in direct proportion to the increased venous tension. The site of incompetent perforator veins frequently can be palpated, which is of the greatest importance from the standpoint of treatment, since it is at such sites that excision is performed. Palpation of the femoral, popliteal and pedal pulses is an essential part of the examination, since arterial insufficiency may preclude surgical treatment and may in some instances account for the patient's symptoms.

Percussion can be used to determine the course of a concealed superficial venous trunk. It is accomplished by palpating the fluid wave set up by tapping the same trunk at a distant point.

Auscultation will reveal a murmur in varicose veins when an arteriovenous fistula is present. Such a fistula should be suspected when varicosities follow trauma or are present in children.

Patency of the Deep Veins.—It is important to assess the patency or sufficiency of the deep veins, since stasis complications may originate from this system rather than from the superficial one. A deep venous block, when present, usually is segmental or partial due to recanalization. Observers formerly expressed fear of dangerous consequences from treating the surface veins when the deep veins were blocked. It is known today that only in the rare case of phlegmasia cerulea dolens, a very acute disease with threatened or acutal gangrene of the limb, are all or most of the deep veins completely blocked. Usually there are merely various degrees of deep venous insufficiency in which compensation is more or less achieved by recanalization and collateral circulation. The secondary superficial varicose veins which developed as an aid in collateral circulation usually add to the total venous insufficiency at the later date when the deep venous episode is old history. Correction of these as well as any primary varicose veins may aid the total venous return rather than harm it.

It is most important to realize, however, that surgical correction of the superficial veins does not clear up the deep venous insufficiency which, in itself, is another problem with another type of therapy.

Perthes' test provides an easy office method of testing the sufficiency of the deep venous return. A tourniquet is applied in the middle of the thigh tight enough to obstruct the return flow of blood through the superficial veins, but not through the deep ones. The patient then exercises by walking or kicking the leg. If the deep veins are patent, the varicose veins below the level of the tourniquet will become less prominent and less tense. On the other hand, if the deep veins are obstructed, the varicose veins below the tourniquet will become more prominent and more tense. Occasionally the results of this test are equivocal, and additional information may be gained by repeating the test with the tourniquet placed at different levels on the leg and thigh, so that segmental impairment may be determined.

The elastic compression test also can be performed in the office if there is doubt about the adequacy of the deep venous system. An elastic bandage or stocking is applied from the instep to at least the knee level, tight enough to obliterate the superficial veins. If the patient tolerates the elastic compression with comfort for three hours or more, the deep veins are patent. On the other hand, if the deep veins are obstructed, the patient, within 15 minutes, will experience a tenseness within the leg, accompanied by pain.

Venography seldom is necessary but may be used as a last resort in unusual cases of suspected arteriovenous fistula, deep venous hemangioma, or complicated deep venous problems in which surgery is controversial.

Retrograde Flow of Blood.—Besides the use of palpation to detect increased tension in the surface veins there are two special tests to demonstrate the retrograde flow of blood through incompetent perforators. They are the Trendelen-

burg test and the comparative tourniquet test. They are so easily performed and so practical for office use that a brief review is justified.

The Trendelenburg test is used to determine the competence of the valve at the saphenofemoral junction. With the patient lying horizontally and the involved lower extremity elevated in order to drain the blood from the varices, a tourniquet is applied below the saphenofemoral junction tight enough to occlude the superficial veins. The patient then stands and the veins of the extremity are observed. Gradual filling of the varices from below upward within a period of 30 seconds is normal. Rapid filling within 10 seconds or less denotes retrograde flow of blood through one or more incompetent perforator veins below the level of the tourniquet. Within 10 seconds the tourniquet is released. If the valve at the saphenofemoral junction is incompetent, there will occur a surge of blood from above downward, in the great saphenous trunk, with maximal distention of the varicosities. This test is dramatic only in far advanced cases and may be difficult to demonstrate in the obese patient.

The comparative tourniquet test of Mahorner and Ochsner is of greatest value in localizing the sites of incompetent perforator veins. The tourniquet is applied as for the Trendelenburg test, but in descending levels on the thigh and leg. The effects on venous filling with the tourniquet at various levels are compared. When the tourniquet is placed above an incompetent perforator vein, retrograde flow of blood occurs. This is prevented when the tourniquet is placed immediately below the perforator site. The site of incompetence is then localized to a point somewhere between the two applications of the tourniquet.

Treatment of Uncomplicated Primary Varicose Veins.—The general physician can accomplish the most good by examining the lower extremities of his patients for varicose veins and providing protection before the complications of stasis develop.[4] Minor degrees of varicosis producing only cosmetic objection and not associated with significant retrograde flow of blood can be ignored and are best left alone. On the other hand, the demonstration of abnormally increased tension by palpation or the special tests demands treatment even in the absence of symptoms or complications. In modern practice there is no more reason to neglect such veins than there is to neglect a hernia, a gallbladder containing stones, or a decayed tooth. The old dictum, "Do not treat the veins unless they cause trouble," no longer is tenable.

Supportive Treatment.—This form of treatment is entirely within the domain of the general practitioner, and consists of compression of the superficial venous system from without. The indications are (1) deep venous insufficiency, (2) initial treatment for complications such as acute ulceration, superficial phlebitis, or edema, (3) pregnancy and (4) patients who refuse surgery. There are no absolute contraindications to this form of therapy, but it should be supplemented or replaced by curative measures whenever possible.

Compression may be achieved with elastic bandages, Elastoplast wrappings, or Unna boots but, for prolonged use, the best support is obtained from a properly fitted elastic stocking which extends from the base of the toes to the level of the tibial tuberosity and includes the heel (Figure 2). Its chief advantages are uniform compression and ease of application. Seldom is it necessary for the stocking to extend above the knee, since protection against stasis is required only from the lower third of the leg downward. It is not enough for the physician merely to tell the patient that he needs elastic support and leave the details to a druggist or surgical appliance dealer. Unless an actual prescription is written and the subsequent accuracy checked after the stocking has been obtained, little benefit may result and the patient in discouragement may fail to wear the appliance.

Figure 2. Heavyweight elastic stocking best suited for prevention or control of stasis complications in primary and secondary varicose veins.

The prescription should specify (1) that the stocking be "made to order" from actual leg measurement, (2) the area to be covered, e. g., base of toes to level of tibial tuberosity, including the heel, (3) weight of material, e. g., heavy, medium, or light and (4) right or left leg, or both.

The best stockings for men are heavy weight, seamless, one-way stretch (in circumference but

not in length), made of rubber with mercerized thread but without nylon which has a tendency to slide. For women, the medium weight stocking in which a thinner grade of rubber is used is preferable. Light weight stockings are for summer wear, for milder cases, or for use when it is desired to include the thigh; they usually contain nylon. It is essential to include the heel when there is much stasis about the ankle. In mild cases the heel covering may be excluded, since this is the part of the stocking that wears out first.

When the correct stocking has been obtained, it is well to advise the purchase of a duplicate one to wear on alternate days and as a spare during washing. The useful life of a stocking worn daily is about four months, and the patient should be instructed to obtain replacements at least three times a year, since elastic recoil is lost by wear and washing. The elastic stocking is to varicose veins what the truss is to the hernia, namely, palliative therapy. At best it combats the altered physiology, but has no effect upon the altered anatomy. It must be realized that, when applicable, surgery is the treatment of choice.

Operative Therapy.—The rationale of surgical therapy entails two objectives, (1) to interrupt retrograde flow of blood at all sites of perforator vein incompetence and (2) to excise the actual varices by stripping or dissection under direct vision. Best results from such therapy will be obtained by surgeons with special interest and training in this field. The surgery should not be considered minor. It is important for the patient to understand that primary varicosis is a progressive disease, frequently involving a diffuse area and, as such, requires follow-up. Only through the joint cooperation of patient, general physician and surgeon can ideal results be obtained and maintained.

Sclerotherapy.—In the past, sclerotherapy was used alone or as an adjunct to surgery, but today it is generally outmoded because of sloughs, allergic reactions, deep venous damage, and the difficulties added to later surgery by the perivenous fibrosis. These dangers are coupled with ineffectiveness due to recanalization, usually within a period of two years. A few die-hards still will champion the method but by current opinion and use it has fallen into the discard.

Treatment for Stasis Complications.—Many patients still seek treatment first because of complications but, fortunately, this attitude is changing. Surgery during this stage generally is contraindicated because of poor wound healing as well as the danger of infection, thrombosis, aggravation of edema, or even pulmonary embolism. One noteworthy exception is thrombophlebitis in varicose veins of the thigh, ascending within the great saphenous trunk. In these cases an emergency high saphenous ligation should be done to avoid the danger of propagation of clot through the saphenofemoral junction into the deep venous system.

The specific compressive therapy for ulceration, phlebitis and dermatitis is the application of an Unna's paste bandage or so-called "boot" It is commercially available in a sealed metal can in which it is kept moist and fresh by wax paper wrapping and cellophane bag. (Figure 3a). The bandage is 4 inches wide, 10 yards long, impregnated with zinc oxide, gelatin and glycerine, and obtained under such names as Medicopaste Bandage, Dome Paste Boot, Gelocast, Cruricast, and the like. Allergic reaction

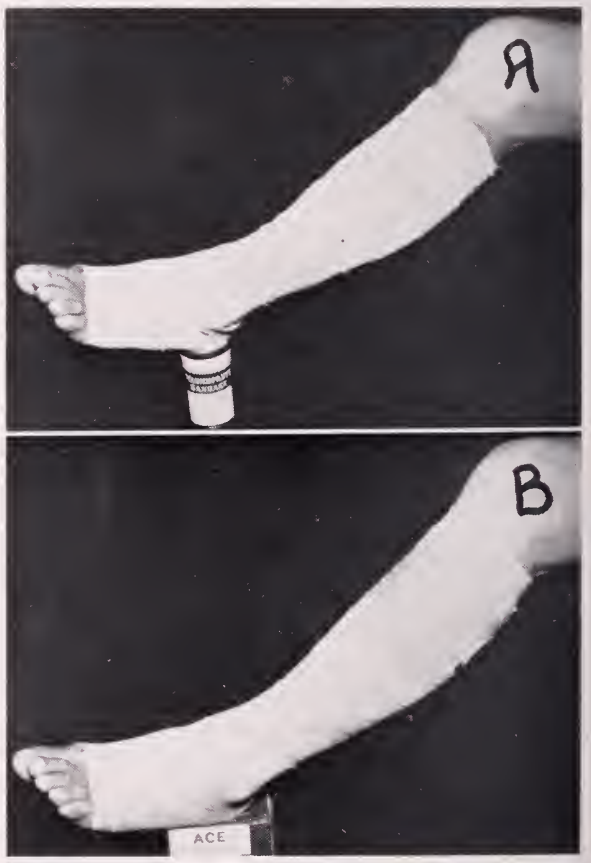

Figure 3. Modern type Unna's paste boot shown in (a), and with overlying Ace rubberized bandage in (b) for additional compression and covering.

to the paste itself is practically unknown. The wrapping is started and anchored just above the malleoli and then wound around the heel and foot to the base of the toes, from whence it is continued up the leg to the level of the tibial tuberosity. It merely should be laid upon the skin, without tension, since it is inelastic and will easily cut the skin behind the heel or over the

dorsum of the foot. It should not be twisted nor reversed, as this will create a cord-like constriction. The patient should dorsiflex and extend the ankle while the bandage is applied to that area in order to allow the proper adjustment for walking. A four-inch wide Ace rubberized bandage is applied over the boot to achieve the desired compression, also to protect the clothing from the sticky bandage. (Figure 3b).

The wrapping should be worn for a week to 10 days, but the patient should be instructed not to hesitate to remove it earlier if any cutting or undue irritation is noted. Distinct improvement, often dramatic, should be obtained, but it usually is necessary to apply the boot at weekly intervals for a month or more before ordering an elastic stocking or proceeding to surgery. Ambulation actually is beneficial and, unless the complication is extremely acute or neglected, it seldom is necessary for the patient to discontinue work during this phase of therapy.

For superficial thrombophlebitis, the Unna boot provides adequate therapy, and antibiotic therapy is not necessary. Even for patients with ulceration, systemic antibiotics are not required except in those cases in which there is the additional complication of acute cellulitis. The ulcer area should be treated locally with an antibiotic ointment such as neosporin and the excoriation of skin about the ulcer itself painted with 1% gentian violet solution. In the small refractory ulcer the use of antibiotic powders is advantageous, but they should be avoided during the initial treatment of painful ulcer because they are irritating and produce stinging. When response to the use of Unna boots is too slow, it is well to apply a foam rubber sponge about three inches in diameter over the ulcer, which has been treated locally and is covered with gauze, and use two Ace rubberized bandages for elastic support. The second bandage prevents slipping of the first and allows added compression.

In dermatitis problems that do not respond to the Unna boot itself, it is useful to paint the eruption with 1% gentian violet solution first. In other instances in which a fungous infection is suspected, it is well to apply Desenex powder either directly or after a preliminary coating with gentian violet solution. Patches of psoriasis or scaly skin may be treated with Riasol solution before the compressive dressing is applied.

External rupture of a varicose vein is a dramatic emergency, since a great deal of blood may be lost within a short time. Elevation of the limb and pressure over the bleeding area will stop hemorrhage. A sterile gauze dressing with a foam rubber sponge for localized compression, and two Ace bandages applied from base of the toes to the tibial tuberosity will allow healing to occur. Thereafter, an elastic stocking should be worn or, preferably, surgical intervention should be instituted.

Telangiectasia

Telangiectasia is dilatation of capillaries and small venules. The etiology may be congenital, hereditary and degenerative, or secondary to wind burn, roentgen ray, arterial or venous insufficiency, or hormonal changes of pregnancy. The condition in minor degree in the skin of the lower extremities is a normal accompaniment to the aging process, occurring both in men and women, particularly about the malleolar areas.

Of clinical interest to the general physician are the scattered focal areas of dermal telangiectasia which occur commonly in the lower extremities of young women with thin or delicate skin. These may coalesce on the thigh or behind the knee and produce psychic distress because of the cosmetic defect; also they may become enlarged, painful and tender premenstrually. These spider-like patches usually are associated with small varicose veins which show prominently through the pale smooth skin of these patients. There is little or no retrograde flow of blood through such veins and, except for the rare instance of rupture, stasis complications are unknown.

Women with the type of telangiectasia just described often have symptoms far out of proportion to the degree of organic varicosis. They complain so bitterly of easy fatigability and aching, particularly behind the knee, that they hardly can straighten the leg because of pain. These symptoms are apt to be most pronounced just before the onset of the menstrual period. Emotionally unstable women or those with varying inadequacies frequently will refer their psychosomatic difficulties to their lower extremities when the objective finding of dilated blood vessels seems to justify their complaints. The women who are sensible, well balanced, and who enjoy their work are satisfied with the simple reassurance from their physician that the condition is constitutional and innocuous, and requires no therapy.

At the other extreme are those who cannot be convinced that they must adjust to the situation, and who eventually find some physician who, against his better judgment, attempts to alleviate the condition by sclerotherapy or surgery. The brownish discoloration from injections, the new telangiectasia that develops in the scar, or the painful keloid that follows, will dissuade the experienced physician from attempting any mechanical therapy in such cases, in which the

primary difficulty is psychiatric. On the other hand, it must be acknowledged that a goodly number of these women do have pain for which something should and can be done.

The most simple and effective remedy for painful telangiectasia in nonpregnant women is full length, sheer, Ace-nylon hosiery which is substituted for the ordinary nylon stockings and attaches to the garter belt. It must be emphasized that this type of stocking is not adequate for patients with retrograde flow of blood; it is excellent, however, for symptomatic telangiectasia. In addition, mild analgesics usually will alleviate the premenstrual pain.

Secondary Varicose Veins (Postphlebitic Leg)

Incidence.—Deep venous thrombosis following major surgical operations occurs in about 2 per cent. In approximately 25 per cent of such patients, spontaneous resolution is complete. In the remaining 75 per cent, however, varying degrees and types of disability are seen. In the latter group ulceration is a complication in approximately 30 per cent. With the large number of patients subjected to surgery each year, it is apparent that proper follow-up care will challenge the general physician.

Pathogenesis of Secondary Varicose Veins and Stasis.—Secondary varicose veins are acquired because of thrombosis and inflammation primary in the deep veins and perforating veins. During the acute phase of deep thrombophlebitis the superficial veins dilate as collateral circulation. They do not become huge nor develop greatly increased venous pressure at this time, because the involved perforator veins are blocked by thrombi which prevent retrograde flow of blood. After a period of a year recanalization of the veins accompanied by venous and perivenous fibrosis occurs and the involved veins become inelastic, valveless tubes. In this condition there is a reflux of blood within the deep veins when the patient stands or strains, and muscular action is not as effective in draining blood back to the heart because of the loss of valvular function.

This increased pressure in the deep veins is then transmitted through the defective perforator veins, which have recanalized, into the superficial venous system. The superficial veins then enlarge and develop increased pressure which produces a state of venous capillary hypertension as in patients with primary varicose veins. It is readily observed, however, that the problem of stasis in this instance is a much more serious one, since eradication of the secondary varicose veins does not correct the primary fault, which is reflux within the deep veins themselves. In addition, the original thrombophlebitis involves the perivenous lymphatics which become scarred and obstructed. It is thus seen that the patient with a postphlebitis limb suffers from a deep venous insufficiency as well as an abnormal lymphatic drainage. This unfortunate combination results in chronic edema of the leg after prolonged standing, and leads to chronic malnutrition of the subcutaneous tissues in the lower half of the leg. Chronic ulcer or "phlebitic ulcer" then develops, most commonly just above the medial malleolus. Pigmentation, increasing induration due to fibrosis, chronic cellulitis, and eczema due to stasis dermatitis ensue.

Treatment of Postphlebitic Stasis.—Current opinion and experience favor conservative therapy for deep venous inadequacy. The so-called principle of the "venous heart" is employed. By the physiologic "venous heart" under normal conditions is meant the upward propulsion of blood in the deep veins during muscular systole of the limbs, with prevention of reflux by closure of normal venous valves during muscular diastole. When the deep veins become valveless, inelastic tubes, the massaging action of muscular systole is diminished and reflux is allowed during diastole by the incompetent valves.

Proper elastic compression by a heavy stocking or Unna boot aids the venous heart mechanism by (1) adding to muscular systole, (2) keeping the deep veins supported during muscular diastole and thus retarding the downward reflux of blood within the deep veins and (3) forcing blood in the normal direction from the superficial to the deep veins. The most practical plan is to apply an Unna boot from base of the toes to level of the tibial tuberosity, including the heel, as already described for stasis complications of primary varicose veins. The boot should be worn for about 10 days and then removed to allow for inspection. A gratifying improvement usually will be noted, but the progress will be slower than in the limb with primary varicose veins. It usually is necessary to reapply the boot in successions of 10 days for a period of eight weeks or more until maximal reduction of edema has been obtained and all skin lesions have healed. A proper elastic stocking is then ordered.

The postphlebitic patient who wears an elastic stocking has a "corrected" leg and not a "cured" leg. It is essential that he understand the nature of the permanent damage to the deep veins, also that while wearing of the stocking will minimize the possibility of further complications, it is no guarantee. During lunchtime or any other possible rest periods the patient should keep the leg above heart level as much as possible.

Deep venous ligations to curtail deep venous reflux usually are ineffective or, indeed, may aggravate the condition. If the patient will wear the proper elastic hosiery, it seldom is necessary to resect the secondary varicose veins, unless reflux into the superficial venous system is not adequately controlled. Lumbar sympathectomy has been suggested for the patient with the causalgia type of pain but, in the author's opinion, it should not be employed unless there is associated arterial insufficiency.

Varicose Veins and Pregnancy

It is essential to differentiate two clinically significant and distinctly separate types of superficial venous disorders in the lower extremities complicating pregnancy, namely, saphenous varicosities and angiectids.

Saphenous Varicosities.—These are the usual classical varicosities of the saphenous system in the subcutaneous tissue of the lower extremity, as seen in nonpregnant women and in men. During early pregnancy these varices usually enlarge and spread. Easy fatigue and heaviness of the legs develop or, if previously present, increase. Following delivery the status of the veins reverts to that before pregnancy or shows some residual progression.

In the author's experience, it is elective to treat the pregnant women with this type of varicosis during the first trimester by the ordinary criteria and methods. The general reluctance to perform vein surgery on the pregnant woman is based on the following considerations: (1) there usually is a marked subsidence of the varicosis following delivery; (2) operation, if followed by wound infection, hematoma, or frank hemorrhage, might lead to deep venous thrombosis with its threat of pulmonary embolism; (3) should abortion occur, the patient might blame the operative procedure.

While the first consideration is based on fact, it can be argued also that pregnancy brings hidden points of venous weakness to light where they may be more easily diagnosed and treated. Furthermore, treatment early in pregnancy may prevent much of the harmful and more permanent effects on the veins. The second and third considerations are potentialities rather than facts borne out by experience. Nevertheless, at all times it must be remembered that during any part of pregnancy surgery usually is elective and can be deferred with use of supportive treatment. One exception exists in the case of ascending thrombophlebitis in the great saphenous trunk of the thigh. This is an absolute indication for immediate high saphenous ligation.

If vulvar varices so large as to call for cesarean section because of threatened rupture are present, it is advisable to carry out operative therapy. Vulvar varicosis to a lesser degree, however, will subside to a spectacular extent following delivery and can be operated upon electively or, in many cases, ignored (Figure 4).

Figure 4. (a) Vulvar varices before delivery. (b) Vulvar varices after delivery.

Removal of saphenous varices during pregnancy does not guarantee nonrecurrence during later pregnancies, particularly in patients who otherwise have a progressive form of the disease. It is the author's usual policy, therefore, to defer surgical therapy until three months after delivery, except in the selected instances mentioned.

Angiectids.—Women with telangiectasia before pregnancy usually experience a distinct aggravation of the condition during pregnancy.[5, 6] Within a few weeks after the beginning of pregnancy, these areas may change to sharply circumscribed, raised, intradermal, conglomerate masses of dark, bluish venules, variable in size, reticular in pattern, which become tender, warm and tense, and which are called "angiectids" (Figure 5). They may produce pain such as to impair seriously the ability of the patient to work during the first trimester of pregnancy. The hormonal nature of the condition is demonstrated by the fact that within 48 hours after delivery there is marked regression of the angiectids, with almost complete disappearance within two to six weeks. Most of these patients retain venous vestiges which are associated with premenstrual enlargement and pain. It is possible to control the pain during pregnancy or premenstrually with estro-

genic hormones, but proper dosages and controls have not been established. Since the condition is benign, one must always weigh the possible hazards of potent therapy with hormones, and preferably avoid their use in all but the extreme

Figure 5. Angiectids of pregnancy.

cases. It is obvious that surgery would be meddlesome in this condition.

Conclusions

1. The general physician's understanding of the physiologic disturbances associated with the various types of venous disorders of the lower extremity is basic for individualization of treatment.

2. Stasis complications can be prevented by proper elastic compression. If elastic stockings are elected, they should be made to order according to the physician's prescription.

3. Most stasis complications can be treated while the patient continues at work. The indications for and proper application of the modern type of the Unna paste boot should be mastered by all general physicians.

4. Surgical therapy is effective when indicated, but is not minor and should be carried out only by those with special training and interest in this field.

5. In the pregnant women a distinction must be made between saphenous varices and angiectids, since in each condition the etiology and treatment differ.

References

1. Angel, J. L. & Wagner, F. B., Jr.: Constitutional Type and Varicose Veins, Am. J. Anthrop. 3:219, 1945.
2. Eger, S. A. & Wagner, F. B., Jr.: Eitology of Varicose Veins, Postgraduate Medicine 6:234, 1949.
3. Wagner, F. B., Jr. & Herbut, P. A.: Etiology of Primary Varicose Veins, Am. J. Surg. 78:876, 1949.
4. Eger, S. A. & Wagner, F. B., Jr.: Varicose Veins, GP 4:32, 1951.
5. Fried, P. H., Perilstein, P. K. & Wagner, F. B., Jr.: Saphenous Varicositics vs. Angiectids, Obst. & Gynec. 2:418, 1953.
6. Fried, P. H., Perilstein, P. K. & Wagner, F. B., Jr.: The Hormonal Cause of the So-Called Varicose Veins of Pregnancy, Arch. Surg. 72:253, 1956.

To Speak Fitly

One of the greatest assets a professional man can have, assuming, of course, that his professional learning is adequate, is the ability to communicate both by word of mouth and by the written word. The art of communication is fast becoming a lost art in the midst of a plethora of communication media. Perhaps the very nature of the media, the necessity for filling with words—any words—the gaping holes of newspaper and magazine columns, the empty minutes on television and radio, has contributed to the gobbledygook we hear and read these days. This necessity has certainly contributed to the carelessness with which we choose these words. At the risk of seeming petty, pedagogical or picayune, I recommend that our profession, particularly. exert great care not only in what we say but in how we say it.

In this modern world, medicine must realize that it, too, is big business. We must choose our spokesmen from among those who can best present medicine's point of view to the public. We should prefer to have all members of the profession as able as Doctor Annis proved to be in his television debates with Walter Reuther this past winter. Since we are not all as gifted as Doctor Annis, we should certainly encourage our prospective medical students to get as firm a foundation as possible in the humanities during their undergraduate days, with emphasis on how to write and how to speak—Fitly. ("In a fit manner; also, at a fit time.").—Hugh H. Trout, Jr., M. D., in Virginia Medical Monthly.

Congenital Anomalies of the Heart in Association With Multicentric Rhabdomyoma

(Case Report)

Alex G. Carabia, M. D., and Enrique Aguado, M. D.

Because of the rarity of intracardiac tumor, its discovery at postmortem examination always is of interest to the pathologist and the cardiologist since in most cases it goes undiagnosed, largely because there is little knowledge of its natural history.

Of some 350 reported cases of cardiac tumor the diagnosis was made ante mortem in 13. In the past decade there has been a great change and, with the advent of improved electrocardiography and angiocardiography, and with cardiac catheterization, the diagnosis will become more common. In the future, rapidly advancing techniques of cardiac surgery will, in many cases, permit more successful removal of this intracardiac neoplasm.

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Figure 1. Nodules in myocardial wall of right ventricle; bulgy myocardial septum; communication of pulmonary artery with aorta by means of a patent ductus arteriosus. Right upper corner shows dilated left atrium.

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Prichard cited 70 cases of intracardiac rhabdomyoma and apparently this tumor is distinctive for dissimilarity of appearance histologically and for the multiplicity of names by which it is known. It is general knowledge that rhabdomyoma most often is listed as "hamartoma" and is accompanied by other developmental anomalies. Many individuals with rhabdomyoma of the heart have, in addition, tuberous sclerosis of the brain, epilepsy, amentia, renal cyst or adenoma as well as malformation of the meninges, pancreas, palate and the like.

Prichard also observed the frequency of the tumor in children who had died of congenital heart disease.

The purpose of this paper is to report a case in which the congenital anomalies appear in the heart itself in association with a multicentric rhabdomyoma. The histology and nomenclature will be reviewed also.

Case Report

The patient's mother, a 25-year-old white female, had been in the hospital on two previous occasions. In June, 1957, she was admitted and delivered of a normal infant after an uneventful prenatal course.

In October, 1958, she was readmitted complaining of a gradually growing tumor in the posterior aspect of the thorax medial to the left scapula. The tumor was excised three days later and reported as myxofibrosarcoma. She was re-

admitted to St. Mary's hospital on February 22, 1960, in early labor following an uncomplicated pregnancy. She delivered an 8 lb., 1 oz. male infant four hours later. After birth the baby showed generalized cyanosis, an irregular heart and a strong, high-pitched systolic murmur. He was treated actively but his condition deteriorated and he expired approximately 18 hours after birth.

Laboratory data on the mother and the baby were not significant. Necropsy, performed one hour after death, showed the full term white male infant with generalized cyanosis. The abdomen was distended. The abdominal organs were not palpable.

The lungs appeared dark brown, firm and collapsed. There was no obstructing material in the upper respiratory tract. The lungs weighed, together, 35 Gm.

The heart appeared grossly enlarged, and weighed 54 Gm. The apex, formed by the left ventricle, felt firm to palpation. There was a dilated left auricle communicating with the left ventricle. There was an open foramen ovale and a very small right atrium with an atrophic auricular appendage and with two small openings for the superior and inferior vena cava. The tricuspid valve was delicate. The pulmonary artery originated immediately behind the tricuspid valve, with absent pulmonary sinus. The artery communicated with the aorta by a patent ductus arteriosus. There was atresia of the aorta from the ductus arteriosus to the aortic valve. The left ventricle showed a rounded, soft yellowish, smooth, glistening tumor filling the left myocardial cavity. The structure originated in the subaortic myocardium but protruded toward the valve and the myocardial cavity, 3.5 cm. in length and 3 cm. in diameter. It was the most conspicuous finding of the postmortem examination, and apparently was causing some degree of aortic stenosis. The left ventricle communicated with the left auricle by means of a normal mitral valve. The right and left ventricle each was 0.5 cm. in thickness. The right ventricle showed three cylindrical polyp-like nodules in the right myocardial wall, each measuring 1.5 cm. in length by 5 mm. in diameter. The pulmonary artery divided into two pulmonary branches. There was absence of pulmonary veins. The remaining organs were normal.

Figure 2. Soft and glistening rhabdomyoma protrudes toward myocardial cavity, also toward aortic valve causing some degree of aortic valvular stenosis. Aortic atresia can be seen in upper portion of illustration.

Microscopic Examination

Lungs: The partially dilated alveoli were filled with aspirated material, chiefly meconium and amniotic debris. There was diffuse inflammatory infiltration in the interstitial tissue formed by wandering neutrophils and mononuclear cells.

The myocardial tumor and nodules were formed by coalescent nests of large spider cells with vacuolated eosinophilic cytoplasm. The cytoplasm emitted projections into the intercellular spaces. The ground substance was formed by loose and firm fibrous connective bands.

Phosphotungstic acid hematoxylin showed no cross striations in the component cells. Baur Feulgen reaction for glycogen and Betz carmine stains were negative. The remaining organs did not show significant changes.

Discussion

The histological expression of intracardiac neoplasm is so varied that usually it is classified according to the predominant tissue.

Myxoma constitutes almost exclusively about 50 per cent of cases of primary cardiac neoplasm. It is found commonly in the atria, 75 per cent occurring in the left atrium. Almost always it attaches to or overlies the fossa ovalis or its rim, and many times forms a clinical picture indistinguishable from that of mitral stenosis.

Myxoma is not difficult to diagnose, since the predominant tissue is myxomatous in character. It has been difficult for pathologists to differentiate histologically rhabdomyoma from other

benign intracardiac tumors, more commonly from intramural cardiac fibroma.

In the cases reported by Kulka and Bigelow, the fibroma was classified as such due to anastomosing collagenous and hyalin bands. It also contained large cells with cross striations and the transition from cardiac muscle to tumor was difficult to determine. The stroma was loose and edematous and contained both spindle cells and striated muscle fibers.

Kulka also reported an intramural tumor found at autopsy in an 8-month-old infant who died suddenly without a history of previous illness. The pale, white, fasciculated tumor, 4 cm. in diameter, was composed microscopically of intertwining bands of collagenous fibrils with spindle cells. Muscle fibers were noted but these were found only in the peripheral portions of the tumor and were thought to represent portions of cardiac muscle entrapped with the tumor. A similar tumor in a 3-month-old infant was described by Brown and Gray. On section it was similar to those described above. Histologically it was composed of large swollen cells with eosinophilic cytoplasm and cross striations. They felt that the fibrous tissue was a secondary manifestation and that the tumor was essentially a rhabdomyoma even though the lesion had little resemblance to the tumor usually described under that name.

Kulka felt that the muscle cells represented entrapped elements and classified his tumor as a fibroma.

Bigelow and others also felt that this tumor was essentially a fibroma but they considered that the cells showing cross striations might be an integral component of the tumor.

Rhabdomyoma has been diagnosed also as glycogenic tumor, congenital nodular glycogenic degeneration and hamartoma or embryonal mesenchymoma of the heart.

Those cases in which one or several distinct nodules are present in the heart (usually that of a child with tuberous sclerosis) constitute the largest number.

Microscopically the nodules consist of the so-called spider cells in which the nodules appear suspended by threads of cytoplasm passing between large vacuoles, sometimes glycogen-filled. Frequently the vacuoles are not large and the cells have abundant granular cytoplasm.

While it is widely accepted that rhabdomyoma is a distinct entity, it is difficult to determine its acceptance as a neoplasm. It may properly be considered a hamartomatous defect. The nodule may well represent focal arrest in the maturation of cardiac muscle fibers since, in one stage of development, the myocardial fibers bear a resemblance to the cells composing the nodule. In general it is 1 to 2 cm. in diameter and usually extends into the cavity of the heart, although it may not be elevated above the surface. It is characterized by large vacuolated "spider" cells which often show radial or transverse striations of their peripheral cytoplasm and contain abundant glycogen. They usually are multiple with gross and microscopic areas of similar tissue, or the myocardium is diffusely affected.

Summary and Conclusions

A case of multiple congenital anomalies of the heart in association with a multicentric rhabdomyoma is reported.

The congenital anomalies consisted of a patent foramen ovale between a large dilated left atrium and a very small right atrium with an atrophic auricular appendage. There were a patent ductus arteriosus, atresia of ascending aorta, absence of pulmonary veins and aortic valvular stenosis caused by the multicentric rhabdomyoma which was 3 cm. in diameter.

Rhabdomyoma and other tumors very rarely are found in the heart. They are interesting post mortem findings since usually they are not diagnosed prior to death. They are of interest to the

Figure 3. Cut surface of tumor with smooth, soft, bulgy parenchyma. Upper half shows atretic portion of aorta.

cardiologist since improved diagnostic angiocardiographic techniques may facilitate detection, and to the thoracic surgeon since with the newly developed techniques of heart-lung machines and hypothermia, they could be successfully removed.

Rhabdomyoma has been reported in association with tuberous sclerosis and with other organic anomalies. The case reported is interesting because the developmental anomalies were in the heart itself.

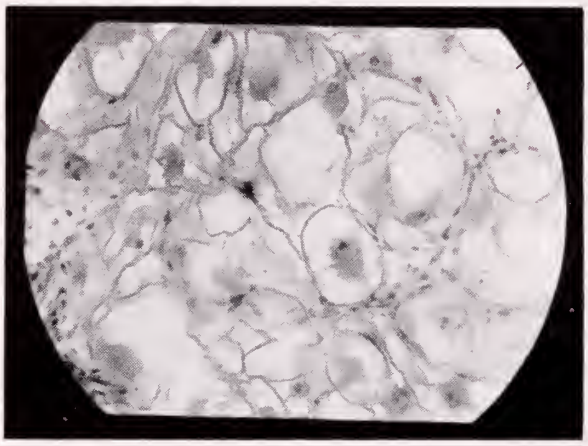

Figure 4. Microphotograph showing central typical spider cell with peripheral cytoplasmic projections. Other spider cells may be seen as well as fibrous connective tissue strands in the intercellular spaces.

No cross striations or glycogen were found with the use of special stains and the term "rhabdomyoma" was adopted because of the typical spider cell which is identified so frequently with this tumor.

References

1. Bigelow, N. H., Klinger, S. & Wright, A. W.: Primary Tumors of the Heart in Infancy and Early Childhood, Cancer 7:549-563 (May) 1954.
2. Brown, T. & Gray, J.: A Case of Congenital Rhabdomyoma of Heart, Lancet 1:915-916, 1930.
3. Conlon, H. J.: Embryonic Mesenchymal Tumor of Heart, Am. J. Clin. Path. 26:297-300 (March) 1956.
4. Farber, S.: Congenital Rhabdomyoma of Heart, Am. J. Path. 7:105-130, 1931.
5. Jenstrom, P. & Crenim, H.: Intramural Fibroma of the Heart, Am. J. Clin. Path. 32:250-256 (Sept.) 1959.
6. Krueger, N. L. & Knoll, W. V.: Intramural Fibroma of the Myocardium, A. M. A. Arch. Path. 26:590-593 (Oct.) 1958.
7. Landing, B. H. & Farber, S.: Tumors of Cardiovascular System, in Atlas of Tumor Pathology, Armed Forces Institute of Pathology, 1956, Section 3, Fascicle 7.
8. Kulka, W.: Intramural Fibroma of Heart, Am. J. Path. 25:549-557, 1949.
9. Potter, E. L.: Pathology of the Fetus and the Newborn, Year Book Publishers, Inc., 1952, pp. 161-163.
10. Prichard, R. W.: Tumors of the Heart: Review of the Subject and Report of One Hundred and Fifty Cases, A. M. A. Arch. Path. 57:98-128 (Jan.) 1951.
11. Scannell, J. G. & Grillo, H. C.: Primary Tumors of the Heart: A Surgical Problem, J. Thoracic Surg. 35:23-36, 1958.
12. Strauss, R. & McArliss, R.: Primary Tumor of the Heart, A. M. A. Arch. Path. 39:74-78, 1945.
13. Willis, R. A.: Pathology of Tumors, St. Louis, C. V. Mosby Co., 1953.
14. Yater, W. M.: Tumors of the Heart and Pericardium, Arch. Int. Med. 48:627-666, 1931.

Creative Leisure

With mechanized industry and the huge productive potential of the modern world, working requirements in terms of hours at work will diminish. Therefore, more time for leisure is in the making for modern society. The way society utilizes this leisure will, in large measure, determine the content of our future as a nation. In the turbulent world, there is a definite need for individuals to have periods of solitude, leisure, and recreation when they may have the opportunity for intellectual growth. In the busy workaday world, with little opportunity for meditation and quiet thinking, there is less chance for the well-springs of the human intellect to flower.

Many individuals in intellectual careers feel the need for disassociating themselves from the busy activities of the workshop and laboratory and their places of daily living in order that they may attain a perspective of what is still to come.

There is a rapid transition occurring. With less physical activity required at work, the opportunity for physical exercise becomes important. The well-balanced program for future happiness requires a wholesome training of the body as a muscular mechanism keeping its various parts in good running order. With the instrument in good condition, the need for an all-absorbing motive for keeping an individual happy and in contact with his useful pursuits is absolutely necessary.—Edward L. Bortz, M. D., in the Journal of the Student American Medical Association.

Special Article

The Impact of a Medical Center Upon a Community*

Joseph C. Hinsey, Ph. D.

It is a real privilege for me to be here this evening and to participate in a program devoted to your new Medical Center. I have treasured my friendship with Doctor Van Liere and Doctor Penrod over many years and regretted my inability to attend the dedication of your new Hospital last fall.

Doctor Penrod has generously provided me with a copy of his paper, "A Modern Medical Center is Born," which will appear soon in the *Journal of Medical Education*. In reading it over, I was deeply impressed by the cooperative effort that has been made by physicians, dentists, pharmacists, other health personnel, and interested citizens, working with the members of the University staff in bringing this great Center into being. It now has been ten years since the whole thing began and you started with a School of Pharmacy and a school of basic medical sciences which dates back to 1912. The cost has been $31 million, of which all but $5,600,000 came from a tax on soft drinks. The federal contribution has been $2,800,000 and other state general funds in like amount. For this, your community has received facilities that will provide for approximately 1200 students (60 medical, 50 dental, 50 nursing, 40 pharmacy, 25 medical technology, 12 occupational therapy, 12 x-ray technology, and 6 dietetic students in each class, with a complement of graduate students in the medical sciences and other fields, and interns, residents and fellows). In addition, there are approximately 520 hospital beds, of which 330 are for acute cases, 140 for chronic cases and 50 for rehabilitation. Your outpatient department has a capacity of 45,000 visits more or less a year.

Distribution of Case Loads

Your Center houses four-year schools of medicine, dentistry, nursing and pharmacy and provides for a program in medical technology. Each of these schools offers opportunities for education at the undergraduate, graduate and postgraduate levels. Experience thus far with regard to your hospital justifies the prediction that the population of around 400,000 within a radius of 30 miles of Morgantown would support a patient load sufficient for the teaching needs of the Center. In the first six months of operation, service demands exceeded expectations, which is certainly unusual. It will require the continuing cooperation of the professions in the area to see to it that the case loads are properly distributed so as to secure a supply of patients to cooperate in the academic programs, patients so selected as to meet the teaching needs of the entire student body. There should be proper distribution in the case load so that there are enough of the ordinary ailments along with the difficult and complex ones, of acute and chronic diseases, of men and women, of children, adolescents, and adults, of ambulant and in-patient cases and of persons from the different ethnic and social groups of your community.

Federal Support of Medical Education

Recently the Association of American Medical Colleges unanimously adopted a statement of proposals for the need of support of medical education by the federal government. I quote from the statement:

"In considering needs of medical education, it is important to understand the variety, complexity and interrelationships of activities involved in the training of medical personnel. This is especially true in relation to the three components of medical education: teaching, research and service. The inseparable nature of these three functions has led to the "medical center" concept as a more realistic characterization of medical education than the too frequently held concept of the medical school, the teaching hospital, the research program, and community

The Author

- **Joseph C. Hinsey, Ph. D., Director, New York Hospital-Cornell Medical Center, New York City.**

*Presented before the Annual Dinner Meeting of the Morgantown Chamber of Commerce in that city on April 25.
Submitted to the Publication Committee, April 28, 1961.

health services as activities independent of each other. However, the two major federal support programs—for medical facilities and for medical research—while understandably directed toward specific restricted objectives, have complicated the conduct of medical education by failing to recognize that research and service are integral functions with teaching. Thus, the need for service facilities and the need for research facilities in a medical education environment have been considered independently by the government, and no provision at all has been made for teaching facilities although teaching is basic to both service and research.

"The medical center typically has as its nucleus a medical school for the undergraduate training of candidates for the M. D. degree. Essential to this program is a strong faculty in the basic health sciences. Such scientists can be retained and can be fully effective only when they are given broad opportunity for research activity—teaching is barren in the absence of an environment conducive to the vigorous pursuit of new knowledge. These same faculty members also are called upon to train another important group of students—the future specialists in their fields who are Ph. D. candidates within the graduate program of the parent university. This is a vital function, particularly for the production of medical teachers and research personnel. Likewise, these faculty members in many situations are called upon to teach basic sciences to dental students, nursing students and paramedical personnel. They must also participate in clinical teaching conferences in support of both undergraduate and graduate medical education.

"The medical center concept is particularly pertinent in the teaching of the clinical specialties Clinical teaching is conducted in relation to patient care, and a high standard of patient care is necessary for good teaching. A core of full-time teachers is required to give continuity and responsible direction and supervision to patient care and the related teaching. The teaching hospital of a medical school, then, whether directly operated by the school or affiliated with it, is an important component of the medical center. Also, opportunity for research is important to the clinical teacher and to good clinical teaching just as is true in the basic sciences.

"The clinical faculty, in addition to its responsibility for teaching of M. D. candidates, is becoming increasingly responsible for graduate training of doctors—interns, residents and fellows. Medical graduates are tending more and more to seek advanced clinical training in hospitals operated in conjunction with medical schools because of the educational orientation of the training. These teaching and training responsibilities put a heavy burden on the schools and their teaching hospitals for which support is required.

"Finally, a new and growing responsibility of medical schools is to provide leadership in coordinating medical services within their area and in providing postgraduate and specialized training opportunities for practicing physicians.

"These various activities of the medical school beyond the four-year M. D. program must be understood and recognized—and support of medical education must be provided in keeping with the concept of the medical center."

In describing the activities of the medical staff in a medical center, it is to be appreciated that a similar picture could be drawn for the other schools in your Center.

Success in our attempt to better provide for the nation's health will depend upon the health and vitality of our nation's medical centers. Nothing has happened in American life that has done more to raise the standards of the nation's health than the establishment and development of medical centers out over this country, such as you have done here. During my lifetime, I have seen this phenomenon at work. There is no question but that the support from federal and state funds, combined with private philanthropy, has done much to make the development of these centers possible. You folks in West Virginia have utilized a unique technique in providing the funds for your Medical Center. I hope that people continue to drink more soft drinks as the years go on. We need more of these centers and we need beter ones, and to the student looking ahead I know of no greater challenge, no more varied opportunity, nor any field that will bring back the satisfaction personally to the individual than will be found in the educational activities of these health centers of our nation.

Types of Health Centers

Health Centers are of different types. Some of them, like our own New York Hospital-Cornell Medical Center, are nestled right in the heart of a great metropolitan community. Such is also the case with Columbia-Presbyterian Center and New York University-Bellevue Center in our own community. In other places, the centers have been developed in metropolitan areas very close by the parent university. The Harvard Medical Center is a case in point.

On the other hand, there are several of the new centers that have been developed right in the heart of a university community, a com-

munity not of particularly large size, such as the one at the University of Florida. There are many unique qualities in each of these centers and advantages and disadvantages can be cited for the location and activities of our centers as a whole. I deem it a particularly fortunate decision, however, that was made by your institution and others responsible for the decision, when the Center was located here in Morgantown in relation to West Virginia University. You are now at the stage where, within another year, you will be graduating the first class, and I think it is important to stop and take stock—to prepare an inventory—to think about the mutual responsibilities that lie ahead.

Responsibilities of Medical Center Staff

First of all, I would like to enumerate what seem to me to be the responsibilities of the staff of the center itself. To begin with, it must work assiduously to maintain and advance an extremely high quality of educational program at the undergraduate, graduate and postgraduate levels. In the second place, it must give great attention to recruitment of students. I am pleased that the geographic restrictions which once were placed upon this institution have been removed. Many of the students from your state go outside the state of West Virginia for their medical education and come back home. There are students who have been educated in institutions outside of West Virginia who come to West Virginia to practice. Your institution is not a local institution; it is a national and an international one. In the third place, the staff of your institution has the responsibility of conducting a well-conceived and well executed research program; one that is balanced and intimately integrated into the whole program of the Center in so far as it is related to teaching and to patient care. In the fourth place, it must maintain a level of patient care of the highest order, and it needs to set standards for the care of, not only those of your own community here, but of the whole state. And in the fifth place, it must continue to be sensitive to the needs of your community.

Academic Responsibility

Our teaching centers should have a reawakening of what some of us have called "academic responsibility." I am going to requote a statement which I have presented in a number of places; I believe it is extremely important from the standpoint of the future of our whole field of medical education. Dr. Aura Severinghaus, Dr. Joseph R. Brown and I were asked to prepare a statement concerning academic responsibility for one of the NIH committees and I quote from it:

"We consider it to be the chief objective and responsibility of those individuals who hold academic appointments in our medical schools or who serve other medical institutions in a comparable manner to, first, add to our present store of scientific knowledge; second, integrate new discoveries with the existing body of knowledge; third, pass on this knowledge to students who, hopefully, will become the academicians of tomorrow; and, fourth, suggest the better application of medical knowledge wherever it has a bearing upon the care of the sick. We believe that this simple statement is timely because there is not infrequently a tendency to ignore the fact that all of these components of academic responsibility are essential, are for the most part inseparable, and must be kept in balance. To reiterate, we believe that medical progress will be secured and hastened to the extent that we succeed in linking to the discovery of new knowledge through research, its dissemination through teaching, and with the least possible delay its application to the betterment of patient care."

The statement implies what I like to call "balance" in a medical center program, a balance which considers its responsibility to the undergraduate students, to the graduate students, and to the practitioners, for a balanced program in teaching, research and patient care. We should never forget that we have responsibilities in these centers to conduct a program of education, to provide an environment in which individuals can educate themselves with the highest possible emphasis upon the quality of this education.

Community Responsibilities

Now let's look at the other side of the coin. What are the responsibilities of the community? First of all, the citizens of this state must understand the aims and objectives of the Center. I have been impressed by the extreme competence of communication exhibited by Doctor Penrod and the members of his staff. I have read a number of the papers that have appeared in medical journals and elsewhere relating to the aims and objectives of this Center.

Second, there must be a conscientious lay participation in the policy determination of this Center, as well as volunteer contributions to its real, day-to-day execution. As I have followed the work of centers of this kind and of educational and philanthropic institutions as a whole, I have become more and more impressed with the value of the contributions made by the members of the lay boards and by the volunteers interested in the institutions.

In the third place, the community needs to cooperate in recruitment in all fields. Much can be done in the whole school system of this state to bring to the future students the appreciation of what an education in this Center can bring to each of them.

In the fourth place, the community must be sensitive to providing the patient load I spoke of in relation to the staff of the institution. A community needs to learn that it is a privilege to cooperate in the teaching and the research programs on the part of the patient of this great Center.

And in the fifth place, the community must provide the necessary financial support for a progressive, on-going program. A soft drink tax will not be enough. There will be need for greater funds as the years go by and the community must help the administration in the obtaining of these funds.

How the Community Gains

Now what does the community have to gain from the work of this Center? First of all, it secures a high standard of preventive and curative health care, which is certainly of great importance. Second, it will be the beneficiary of the increase in the personnel devoted to the problems of health in your state as a whole. The work of Weiskotten and Altendorfer, and others, has demonstrated that students tend to locate in the community in which they have received their professional education. There will be less tendency for West Virginia students to migrate to other areas if they have received their professional education here. In the third place, there will be the opportunity for your citizenry to understand better the research being conducted in the Center and thus, to understand better the work being done over the country and over the world. It will become more meaningful to work for the support of the special interests involved in your research program here. And in the fourth place, the whole economy of the state will gain indirectly if a high standard of health is maintained. Healthy citizens are not on welfare rolls and are a much greater economic asset.

These returns will accelerate and develop as the years go by, and all of you will profit just as other communities over the country have profited when medical centers have been developed.

The Physician on the Witness Stand

A MEDICAL witness who testifies for the first time should take the time to ask for and receive a preview of his part in the trial of the case. He should be told the rules of cross-examination; the meaning of and reason for the "hearsay" rule, the rule relating to admissions against interest and the effect of impeachment and of other rules under which his testimony will be received.

For example, it is a common practice for cross-examiners to inquire into the compensation which the doctor has been paid or expects to be paid for attending the trial. The question is permissible and is material since it goes to his interest in the case. But there is no reason for him to be thrown off balance when the question is asked, probably in substantially the following form: "Doctor, I suppose you are being paid by the plaintiff to testify for him." The answer should be: "Oh, no, I am being paid only for my time, my testimony is not for sale."

Another "trick question" is: "Doctor, have you talked to anyone about the case?" If he says no, the jury knows that isn't true because any lawyer worth his salt will have talked to every witness he expects to use. If you say yes, the other lawyer may try to infer he was told how to testify. The only thing to do is to say frankly that he has discussed the case in advance of the trial and his only purpose is to report the facts.

Cross-examination strategy on occasion may lead an attorney to attack a medical expert's opinion by questioning him with respect to statements of a contrary view expressed in medical textbooks or scientific papers. Jurors for some reason seem to respect the authority of the written word in preference to oral testimony or opinion.

This inclination may be effectively overcome by the witness who may ask to see the writing, take his time to evaluate the conclusions in conflict with his own, explain the reason his opinion is more valid or distinguish between his and the contrary one. Most important, however, the doctor must remain composed when counsel begins this method of impeaching his conclusions.—Journal, Medical Association of Georgia.

PRESIDENTIAL DINNER

94th Annual Meeting
West Virginia State Medical Association

The Greenbrier

Crystal Dining Room

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Saturday Evening
August 26

7:30 o'clock

//

SPEAKER:

Edward R. Annis, M. D.

Miami, Florida

Tickets Will Be Placed On Sale in the Registration Area at The Greenbrier
Beginning Wednesday Afternoon, August 23.

The President's Page

Valedictory

It was my pleasure to represent you at the Annual Meeting of the American Medical Association in New York City, July 25-29. I attended the meeting of State Presidents on Sunday afternoon and sat in on the House of Delegates and committee meetings which held special interest for us in West Virginia. I also found time to take advantage of some of the outstanding scientific sessions. You were represented in the House of Delegates by your delegates, Drs. Frank J. Holroyd and Charles A. Hoffman; and alternates, Drs. J. C. Huffman and Thomas G. Reed. Your president elect, Dr. D. E. Greeneltch, was also in attendance at all the above meetings.

One of the highlights of the Convention was the Aces and Deuces Breakfast on Tuesday morning at 7:30 a. m. "Aces and Deuces" is an organization made up of the representatives of states which have only one or two delegates to the AMA. Dr. Frank Holroyd of Princeton is the secretary-treasurer of this national organization, and our own Bill Lively was in charge of arrangements for the breakfast. It was a delightful affair. We were again deeply proud of Dr. Walter E. Vest who gave the Invocation. The national stature and prestige which Doctor Vest enjoys is a source of great pride to all of us in West Virginia medicine. Other West Virginians attending this breakfast were: Dr. and Mrs. Charles A. Hoffman, Dr. and Mrs. Thomas G. Reed, Dr. and Mrs. Frank Holroyd, Dr. and Mrs. D. E. Greeneltch, Dr. and Mrs. J. C. Huffman, and Dr. and Mrs. John Hash.

Mrs. Hash was one of the West Virginia delegates to the Annual Meeting of the AMA Auxiliary. She was extremely proud of Mrs. Clark Sleeth and of her report on the activities of the Woman's Auxiliary to the State Medical Association.

May I extend to all of you a most hearty invitation to attend our 94th Annual Meeting at The Greenbrier, August 23-27. I urge you, if you have not already done so, to make your reservations immediately. You will see the outstanding program printed elsewhere in this issue of *The Journal*. A special highlight this year will be our Presidential Dinner on Saturday night. This dinner will honor the president of the American Medical Association, Dr. Leonard W. Larson, and Mrs. Larson. We will have as our speaker, Dr. Edward R. Annis of Miami, Florida, the brilliant TV debater. We wish that every doctor in West Virginia could hear Doctor Annis. Another feature of the program for the evening will be the awarding of Presidential Citations to doctors throughout the State for Public Service. These Citations will be given to doctors "who have made an outstanding contribution in their respective communities, outside the practice of medicine, and in fields of education, culture, welfare, recreation, etc."

We hope that those of you who have high school and college sons and daughters will bring them along, or, have them join you on Saturday. Our sons, John and Dick, will entertain with a dance at Kate's Mountain Lodge on Saturday evening from 8:00 P. M. until 10:00, or later. The Greenbrier staff will be in charge of entertainment for the evening and transportation will be furnished from the hotel. This promises to be a most enjoyable affair for the young folks and will enable them to get better acquainted with each other.

This issue marks the last time that I will be filling the President's Page. The rapidity with which the tenth of the month (the day this page is due in the headquarters offices) has appeared has been another of the ways in which I have noticed how quickly the year has gone by. My term will be concluded on Saturday afternoon, August 26, at approximately 4:00 P. M.

It would be impossible for me to list here in the space allowed on this page the names of the many whose service, loyalty and devotion to assigned tasks have made possible any forward strides and any successes this Administration has enjoyed. May I only add my humble gratitude. I shall forever cherish the high privilege I have had in working with all of you this year. I thank you on behalf of the West Virginia State Medical Association.

I am sure all of you join with me in pledging to Dr. D. E. Greeneltch, the incoming president, the same cooperation and loyalty which you have so graciously shown me.

John W. Hash

John W. Hash, M. D., President

THE WEST VIRGINIA MEDICAL JOURNAL

Official Organ of the West Virginia State Medical Association

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EDITORIALS

ANNUAL MEETING AT THE GREENBRIER

We hope you have made arrangements to be among the more than 800 persons who are expected to attend the 94th Annual Meeting at The Greenbrier later this month. Take time to study the complete program which appears elsewhere in this issue of *The Journal* and we feel sure you will agree that this convention will be among the most outstanding in the long history of the West Virginia State Medical Association.

The Chairman of the Program Committee, Dr. Halvard Wanger of Shepherdstown, and the other members, Drs. Hu C. Myers of Philippi and Thomas H. McGavack of Martinsburg, have worked hard and faithfully during the past nine months to arrange a scientific program that will be of interest to all members of the State Medical Association.

The prominent physicians and surgeons who have accepted invitations to present papers during the general scientific sessions are regarded as authorities in their respective specialties. Without exception, the speakers also have accepted invitations extended by sections and affiliated societies to present papers before afternoon meetings of their groups. One physician is scheduled to speak before four groups during the three-day meeting.

Honor guests will include Governor W. W. Barron and Dr. Leonard W. Larson, President of the American Medical Association. Governor Barron will deliver an address at the opening session on Thursday morning, August 24, and Doctor Larson will be the featured speaker at the second session of the House of Delegates on Saturday afternoon, August 26.

John W. Hash, M. D.
President

We also will be honored to have with us Dr. Edward R. Annis of Miami, Florida, who is perhaps the leading spokesman for the medical profession in this country. He has accepted Dr. John W. Hash's invitation to appear as speaker at the Presidential Dinner on Saturday evening honoring Doctor Larson, the AMA President.

Nearly a decade has passed since this type of function has been arranged in connection with an annual meeting, and we are indeed fortunate to have as our speaker this dedicated physician who has represented us so ably in nationally televised debates with Walter Reuther and Senator Hubert Humphrey.

During recent months, Doctor Annis has spent more than half of his time away from home delivering addresses before audiences in cities throughout the country. He is Chief of the Department of Surgery at Mercy Hospital in Miami, and has a private practice limited to general surgery and gynecology.

A reception and cocktail party honoring the officers of the State Medical Association will precede the Dinner. Physicians, their wives, guests and representatives of our industrial exhibitors are cordially invited to attend both the Reception and Dinner.

The Woman's Auxiliary will sponsor a Cabaret Dance at the Casino on Friday evening. Mrs. Clark K. Sleeth, the President, has issued a cordial invitation to those in attendance at the convention to attend this popular entertainment feature.

The scientific and industrial exhibits, which will be housed in Chesapeake Hall, are a most important and integral part of our convention program. We hope that you will spend several hours in the exhibit hall and take time to talk with representatives of the firms that have booked space during the meeting.

You will observe during your visit to The Greenbrier that the new West Virginia Wing is nearing completion. The management has indicated that the wing will be available for use within the next few months, and it will house one of the largest exhibit halls of any resort hotel. There also will be two meeting rooms with seating capacities of 475 and 125.

If you have not made your reservations at the Hotel, we urge you to do so without delay. Requests for room accommodations should be sent directly to the reservation manager. Reservations as of this date (July 15) have passed the six-hundred mark.

We'll see you at The Greenbrier!

ERYTHROPOIETIN AND HYPOXIA

It is known that there is a rather rapid recovery in the number of red blood cells following hemorrhage, and also that high altitude (low oxygen tension) is capable of producing a pronounced polycythemia. It was generally believed that the primary stimulus for erythropoiesis at altitude is caused by the low oxygen tension in the bone marrow. It has been shown by Grant,[1] however, that a vigorous erythropoiesis may occur although the bone marrow oxygen tension is not low.

For many years the exact nature of the erythropoietic stimulus was not known. It was felt, however, that a humoral mechanism might be possible. Carnot and Deflandre[2] as early as 1906 described an erythropoietic stimulating substance in the circulation following hemorrhage, (anemic hypoxia), and the term "hemopoietine" was introduced to designate the unknown stimulating substance in the serum. This work was challenged by some workers, but on the whole it has been accepted. Förster[3] in 1924 first described the presence of hemopoietine in sera of animals exposed to low oxygen tensions (anoxic hypoxia). His work has been confirmed by numerous investigators.

It is now recognized that there is a circulating erythropoietic stimulating factor which is detectable in blood plasma of men—and of animals—who have been exposed to a low oxygen tension, or have suffered a hemorrhage or who have been treated by cobalt. This factor is probably also found in pregnant, fetal and newborn animals. Recent work has indicated that principally the kidney is concerned as the source of this factor.

It has been shown that this factor appears in the blood rather rapidly: for example, in some animals it is known that plasma erythropoietin rises significantly in about 4 hours in response to an hypoxic stimulus.

As would be anticipated, an excessive amount of erythropoietin appears in the blood in cases of polycythemia vera. In some types of anemia, but not in all, erythropoietin may reach a high level, but for some reason, as yet not understood, is not effective as far as alleviating the anemia is concerned.

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1. Grant, W. C., Fed. Proceed., 7, 43, 1948.
2. Carnot, P., and Deflandre, Compt. rend. Acad. sci., 143, 384, 1906.
3. Förster, J., Biochem., Ztschr., 145, 309, 1924.

The grand old man of American Medicine has passed on to "the undiscovered country from whose bourn no traveler returns"; in his sleep, as he probably would have wished. His face we'll see no more but his spirit and example still constitute a shining beacon to the profession and will do so as long as this generation of doctors survives.

WALTER LAWRENCE BIERRING, M. D.

Doctor Bierring was born in Davenport, Iowa, on July 15, 1868. His parents had only recently come to America from Denmark. His father, a fairly close relative to the explorer who gave his name to Behring Strait and Behring Sea, had spent sixteen years as a globetrotter, much of the time as a sailor. However, he had been engaged in warfare long enough to be taken prisoner in the Crimean War and had served three years in the U. S. Navy during the War Between The States. After the fall of the Confederacy, he returned to his home in Denmark to claim a bride, Elizabeth Jessen, who was instrumental in guiding him to America and far inland to avoid the lure of the sea. They pitched their tent at Davenport in a community settled largely by German-speaking people. Hence, as he grew to manhood, young Walter learned to speak German and Danish almost as fluently as he did English. His German was later to be very valuable when he did postgraduate study in Europe.

As a lad of fourteen, he had the misfortune to have a foot injured by the wheels of a train, and years later developed a malignancy in the same leg which was treated by a low thigh amputation with a resultant cure. His prosthesis served him so well that he apparently was never seriously handicapped in his work or travel although he walked with a moderate limp.

During his European studies Doctor Bierring worked with Pasteur and was trained there in the preparation of diphtheria antitoxin. Upon his return to Iowa in 1895, he started the production of the antitoxin, the first produced west of New York and he actually administered the product the first time it was given west of the Father of Waters.

We shall pass over most of his honors which were legion. He was a Past President of the American Medical Association and a recipient of its Distinguished Service Award. While not the founder of Alpha Omega Alpha, he was the man who really developed the organization and was for many years the editor of its Journal, *The Pharos.* Only about a year ago did he ask that a successor be named and Dr. Wilburt C. Davisson was chosen in his stead. He was instrumental in the organization of both the National Board of Medical Examiners and the Federation of State Medical Licensing Boards and through these instrumentalities brought considerable order out of almost complete chaos in state medical licensure. He was largely responsible for the formation of the Board of Internal Medicine and was its secretary for a quarter of a century. Incidentally, we may add that he was a Phi Beta Kappa and a Master Mason.

Walter Bierring never grew old, but maintained his youth and adjusted gracefully to his advancing years. If ever a man achieved DeSoto's quest for the Fountain of Youth, that man was Doctor Bierring. He maintained his mentality and his memory unimpaired and at the recent banquet of the Federation of Licensing Boards introduced without error all those seated at the speakers' table and most of those in the audience.

In closing, we quote from Dr. William B. Bean's classic "Appreciation" written while Doctor Bierring was yet living but published posthumously in the July issue of *Geriatrics*:

> "In a society preoccupied by the problems of an aging population, it is fitting to pay tribute to one who has managed to grow old gracefully, keeping his youthful enthusiasm and productivity. The tragedy of aging is not so much the decline in the functions of youth as the failure in youth to muster and employ the available talents for contributions which are valuable to society and rewarding to the individual when he grows old.
>
> "Dr. Walter L. Bierring personifies the traits, attributes, and capacities which enable a person to remain creative; he is at once a stimulus and a delight to his junior colleagues. In a professional career that spans seven decades, Doctor Bierring has witnessed most of the truly great evolutions of modern medicine and has played a large role in the great growth of the field of public health in modern society.
>
> "Doctor Bierring has been fortunate in possessing that rare combination of natural advantages and the habits and attitudes of life calculated to employ them well. He is a happy example of a sound mind and a sound body, neither of which was allowed to ascend over the other. Thus he has escaped the bane of our present society, in which far too few people mature but instead join the army of aging children whose idle hands and often empty heads exemplify the easual apathy of undeveloped talents.
>
> "Doctor Bierring's life exemplifies the rare phenomenon of productivity continuing with advancing years. Thus he has been able to combine the enterprising innovations and inquiries of youth with the tempering experience and wisdom of age. He has escaped the danger epitomized by La Rochefoucauld when he said that 'Old men are fond of giving good advice in order to console themselves for being no longer able to serve as bad examples.'"

Times of general calamity and confusion have ever been productive of the greatest minds. The purest ore is produced from the hottest furnace, and the brightest thunderbolt is elicited from the darkest storm.—Caleb Cotton.

GENERAL NEWS

Distinguished Guests To Attend Convention, Aug. 24-26

Governor W. W. Barron and Dr. Leonard W. Larson, President of the American Medical Association, will be among the prominent guest speakers who will appear on the program at the 94th Annual Meeting of the West Virginia State Medical Association at The Greenbrier in White Sulphur Springs, August 24-26.

More than 800 persons, including physicians, their wives and guests, are expected to attend the three-day meeting at the world-famous resort hotel later this month.

Governor Barron will deliver an address before the first general session in the Theatre at 9:15 o'clock on Thursday morning, August 24. It will mark Governor Barron's first appearance as a speaker on the program at an annual meeting of the State Medical Association.

Doctor Larson, prominent pathologist of Bismarck, North Dakota, was elevated to the presidency of the AMA at the annual meeting in New York City in June. He is widely known among West Virginia physicians who have attended annual AMA meetings during the past several years. He has held many offices in the national organization and served as Chairman of the Board of Trustees prior to being named president elect at the 1960 meeting in Miami Beach, Florida.

He will be the guest speaker before the second session of the House of Delegates on Saturday afternoon, August 26. His address will be heard shortly after the House convenes at 3:30 o'clock.

House of Delegates To Meet Twice During Meeting

The Program Committee has announced that there will be two sessions of the House of Delegates during the Annual Meeting at The Greenbrier.

The first session will be convened at 9:00 o'clock on Wednesday evening, August 23, and the second session is scheduled for 3:30 o'clock on Saturday afternoon, August 26.

Dr. Annis Speaker at Presidential Dinner

Dr. John W. Hash of Charleston, President of the State Medical Association, announced last month that Dr. Edward R. Annis of Miami, Florida, had accepted his invitation to appear as speaker at the Presidential Dinner honoring Doctor Larson, the AMA president, which will be held in the Crystal Dining Room on Saturday evening, August 26.

Doctor Annis, a surgeon and father of eight children, has won renown during the past year for his nationally televised debates with Walter Reuther, head of the United Automobile Workers, and Senator Hubert Humphrey of Minnesota.

The Presidential Dinner at this year's meeting will mark the first time in several years that this type of function has been arranged in connection with an annual meeting.

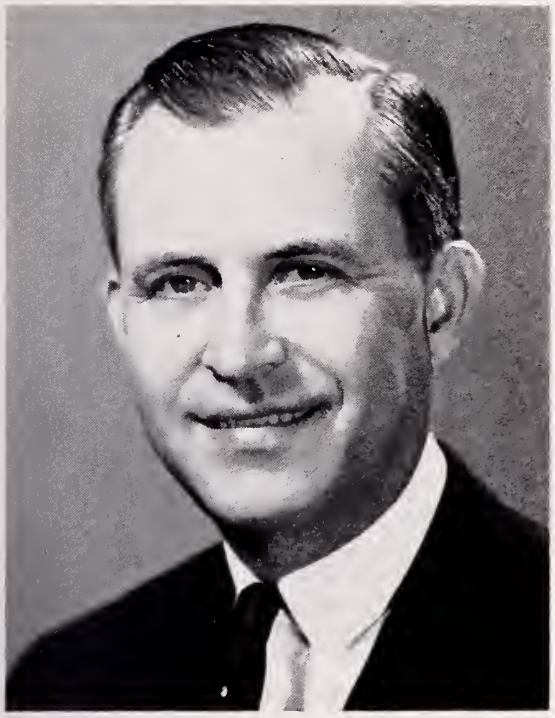
Leonard W. Larson, M. D.
AMA President

A Cocktail Party and Reception honoring officers of the West Virginia State Medical Association will be held on the Chesapeake Hall Terrace preceding the Dinner.

Tickets for the Presidential Dinner will be placed on sale in the registration area, beginning on Wednesday afternoon, August 23. Reservations will be limited to 350 persons.

Pre-Convention Meeting

Although the convention will not be opened formally until Thursday morning, August 24, there are several



Gov. W. W. Barron

committee meetings scheduled for Wednesday afternoon, August 23. The pre-convention meeting of the Council will be held that afternoon at 4 o'clock.

The registration desk will be open from 2:30 to 4 o'clock on Wednesday afternoon, and from 8:30 to 9:30 that evening. The desk will be open on the main floor lobby from 8:30 A. M. to 5 P. M. daily thereafter during the convention.

Presidential Address by Dr. John W. Hash

Dr. John W. Hash of Charleston, president of the West Virginia State Medical Association, will deliver his presidential address at the first session of the House of Delegates which will be held in the Fillmore and Van Buren Rooms on Wednesday evening, August 23, at 9 o'clock. He will preside at a business session which will follow his address.

General Scientific Sessions in Theatre

All morning, afternoon and evening meetings in connection with the convention will be held in the air-conditioned convention unit of The Greenbrier.

General scientific sessions will be held in the Theatre on the registration floor level, directly under Chesapeake Hall where the scientific and industrial exhibits will be on display.

The 1961 Program Committee

Dr. Halvard Wanger of Shepherdstown is the chairman of the Program Committee for the 94th Annual Meeting of the West Virginia State Medical Association. Other members are Drs. Thomas H. McGavack of Martinsburg and Hu C. Myers of Philippi. They were appointed by the president, Dr. John W. Hash of Charleston.

Motion Pictures

Dr. Ralph H. Nestmann of Charleston is chairman of the committee arranging the motion picture program during the three-day meeting. Sound motion pictures on appropriate scientific subjects will be shown on Thursday, Friday and Saturday mornings prior to the opening of each general session.

Formal Opening of Convention Thursday Morning

The convention will be called to order by Dr. Halvard Wanger of Shepherdstown, Chairman of the Program Committee, on Thursday morning, August 24, at 9 o'clock. The address of welcome will be delivered by Dr. John W. Hash, President of the State Medical Association.

The first speaker on the program will be Gov. W. W. Barron, who will speak on a subject of interest to members of the medical profession, their wives and guests.

The meeting will then be turned over to Dr. Hu C. Myers of Philippi, who will serve as moderator for the first general session. The guest speakers and their subjects are as follows:

Edward L. Compere, M. D., Professor and Head of the Department of Orthopedic Surgery, Northwestern University School of Medicine, Chicago, Illinois. Subject: "Helpful Hints to the Doctor in General Practice."

Annual Meeting on E. S. T.

The Greenbrier, at White Sulphur Springs, operates throughout the year on Eastern Standard Time, and EST will therefore be observed strictly in the schedule of all events in connection with the annual meeting of the West Virginia State Medical Association there, August 24-26, 1961.

Rubin H. Flocks, M. D., Professor and Head of the Department of Urology, State University of Iowa College of Medicine, Iowa City, Iowa. Subject: "Prostatism."

Philip Thorek, M. D., Clinical Associate Professor of Surgery, University of Illinois College of Medicine, Chicago. Subject: "Diseases of the Esophagus in General Practice."

Thursday Afternoon Program

Dr. Pat A. Tuckwiller of Charleston will preside at a meeting of the Resolutions Committee which will be held at 2 o'clock on Thursday afternoon.

Dr. Edward L. Compere of Chicago will present a paper before a meeting of the Section on Orthopedic Surgery at 2 o'clock. His subject will be "The Causes and Prevention of Pseudarthrosis in the Treatment of Fractures."

Dr. B. B. Richmond of Beckley will preside at a meeting of the Section on Urology which will be held at 2 o'clock. The speaker will be Dr. R. H. Flocks of

Iowa City, Iowa, whose subject will be "Some Aspects of Pediatric Urology."

An open meeting of the West Virginia State Society of Allergy will be held at 2 o'clock. Dr. Marshall J. Carper of Charleston, president of the Society, will deliver an address of welcome and the moderator for the scientific session will be Dr. Merle S. Scherr of Charleston.

The guest speakers and their subjects are as follows:

Homer E. Prince, M. D., Crockett, Texas. Subject: "A Practical Approach to Mold Allergy."

Philip Blank, M. D., Pittsburgh. Subject: "Atopic Dermatitis."

Jose M. Quintero, M. D., San Juan, Puerto Rico. Subject: "Physiopathological Considerations on Bronchial Asthma."

Dr. George F. Evans of Clarksburg will preside at a meeting of the WVU Liaison Committee which will be held at 4 o'clock.

D. E. Greeneltch, M. D.
President Elect

The West Virginia Chapter of the Medical College of Virginia Alumni Association will hold a cocktail party on Thursday evening at 6:30 o'clock. Dr. John A. B. Holt of Charleston is in charge of arrangements.

Second General Session
Friday Morning

Dr. Thomas H. McGavack of Martinsburg will serve as moderator for the second general session beginning at 9:30 o'clock on Friday morning, August 25. The guest speakers and their subjects are as follows:

Karl Menninger, M. D., Dean of the Menninger School of Psychiatry, Topeka, Kansas. Subject: "Major Psychiatry and Minor Psychiatry."

Henry T. Ricketts, M. D., Professor of Medicine, University of Chicago School of Medicine, Chicago. Subject: "Types of Diabetes and Standards of Control."

Edward H. Rynearson, M. D., Chairman of the Sections on Metabolic Diseases at the Mayo Clinic and Professor of Medicine at the Mayo Foundation for Medical Education and Research, Medical Graduate School, University of Minnesota. Subject: "Use and Abuse of Hormones."

Friday Afternoon Program

Three guest speakers will appear on the program before a meeting of the West Virginia Pediatric Society which will be held on Friday afternoon, beginning at 1:30 o'clock. Dr. Grover C. Hedrick, Jr., of Beckley will preside and the speakers and their subjects are as follows:

Waldo E. Nelson, M. D., Philadelphia. Subject: "Antenatal Origin of Disease."

William G. Klingberg, M. D., Morgantown. Subject: "Insecticide Poisoning." Doctor Klingberg will also discuss the services and facilities of the Department of Pediatrics at the WVU School of Medicine.

Miss Katharine E. Cox, Charleston. Subject: "Facilities and Services of the State Hygienic Laboratory."

At the conclusion of the formal program, there will be a cocktail party for members sponsored by Baker Laboratories.

Dr. John T. Chambers of Charleston will preside at a meeting of the West Virginia Obstetrical and Gynecological Society which will be held at 2 o'clock. The guest speaker will be Dr. Thaddeus L. Montgomery of Philadelphia, whose subject will be "The Content and Practice of Present-Day Obstetrics and Gynecology."

Dr. Philip Thorek of Chicago will present a paper on "Cancer—The Surgeon's Dilemma" before the Section on Surgery at 2 o'clock. Dr. Charles E. Staats of Charleston will preside.

Dr. John A. B. Holt of Charleston will preside at a business meeting of the West Virginia Academy of Ophthalmology and Otolaryngology which will be held at 2 o'clock.

"Psychiatric Case Study" is the subject of a paper which Dr. Karl Menninger of Topeka, Kansas, will present before a meeting of the Section on Neurology, Neurosurgery and Psychiatry which will be held at 2 o'clock. Dr. Albert L. Wanner of Wheeling will preside.

Dr. E. L. Crumpacker of White Sulphur Springs will preside at a meeting of the Section on Internal Medicine which will be held at 2:30 o'clock. The guest speakers and their subjects are as follows:

Henry T. Ricketts, M. D., Chicago. Subject: "The Riddle of Diabetic Retinopathy."

Edward H. Rynearson, M. D., Rochester, Minnesota Subject: "Which Goiters are Best Treated with Surgery and Which with Radioactive Iodine?"

A business meeting will follow the scientific program.

Dr. Andrew K. Butler of Wheeling will preside at a business meeting of the West Virginia Radiological Society which will be held at 3:30 o'clock.

Final General Session
Saturday Morning

Dr. Halvard Wanger of Shepherdstown will serve as moderator at the third and final general scientific session beginning at 9:30 o'clock on Saturday morning, August 26. The guest speakers and their subjects are as follows:

Ivan L. Bennett, M. D., Baxley Professor of Pathology and Director of the Department of Pathology, The Johns Hopkins University School of Medicine, Baltimore. Subject: "Resistant Infections."

Thaddeus L. Montgomery, M. D., Professor and Head of the Department of Obstetrics and Gynecology, Jefferson Medical College of Philadelphia. Subject: "Labor is for the Baby."

Waldo E. Nelson, M. D., Professor and Head of the Department of Pediatrics, Temple University School of Medicine, Philadelphia. Subject: "Infections in the Neonatal Period."

No Convention Registration Fee

No registration fee will be assessed against either members or guests in connection with the 94th Annual Meeting of the West Virginia State Medical Association at The Greenbrier in White Sulphur Springs, August 24-26, 1961.

Saturday Afternoon Meetings

Dr. Werner A. Laqueur of Beckley will preside at a business meeting of the West Virginia Association of Pathologists which will be held at 1:30 o'clock on Saturday afternoon.

Dr. Philip Thorek of Chicago will present a paper on "Pre- and Post-Operative Care" before a meeting of the West Virginia Society of Anesthesiologists at 2 o'clock. Dr. Logan W. Hovis of Parkersburg will preside.

Second Session of House of Delegates

Dr. John W. Hash, the president, will preside at the second and final session of the House of Delegates which will be convened at 3:30 o'clock on Saturday afternoon.

Dr. D. E. Greeneltch of Wheeling, the president elect, will be installed as president during the business session. Other officers for 1961-62 will also be elected and installed.

Dr. Leonard W. Larson of Bismarck, North Dakota, president of the American Medical Association, will be the guest speaker at this session of the House.

Dr. Myer Bogarad of Weirton, who was named as West Virginia's "General Practitioner of the Year," will be introduced, together with Clare D. Edman of Parkersburg, the recipient of the State Medical Association's 1961 four-year scholarship to the West Virginia University School of Medicine.

Dance on Friday Evening

The Woman's Auxiliary to the State Medical Association will sponsor a Cabaret Dance at the Casino on Friday evening, August 25, beginning at 10 o'clock. Prizes to winners in the Auxiliary's golf and tennis tournaments will be awarded during intermission.

Limousine service will be provided between the Hotel and the Casino during the dance hours.

Dance for High School and College Guests

High school and college guests attending the convention are invited to attend a Dancing Party to be given by John and Dick Hash on Saturday evening, August 26, at Kate's Mountain Lodge. Transportation will be provided between the Hotel and the Lodge.

Cocktail Party and Presidential Dinner

The climax of the three-day meeting will be the Cocktail Party and Reception and the Presidential Dinner on Saturday evening. All members of the Association and Auxiliary, their families, representatives of the industrial exhibitors and guests are invited to attend.

Industrial and Scientific Exhibits

Chesapeake Hall in the Convention Unit will house the more than 50 exhibits which will be set up in connection with the meeting.

The exhibits will be open daily from 8:30 A. M. until 5 P. M. Physicians, members of the Auxiliary and guests are invited to visit and talk with the more than 100 representatives of various drug and accessory houses who will be present throughout the meeting.

Motion Picture Schedule

Dr. Ralph H. Nestmann of Charleston, chairman of the motion picture program for the Annual Meeting at The Greenbrier, has announced that films will be shown each morning prior to the general scientific sessions. The starting times for the films will be at 8:20 A. M. on Thursday, Friday and Saturday mornings.

The film on Thursday morning will be "The Disability Decision," which describes how the patient's claim for disability is processed at the local, state and national levels. Time will be allotted for a question and answer period.

There will be two films on Friday morning. The first film will be "The Surgical Treatment of Mitral Stenosis By An 'Open' Technique," and the second film will be "Anti-TB Drugs In The Medical and Surgical Treatment of Tuberculosis."

The films on Saturday morning will be "Bronchitis and Bronchiectasis," a stimulating and enlightening report on a common and sometimes confusing situation; and "Medicine and Disability," an explanation of the need and uses of medical and laboratory documentation (especially pulmonary function testing) for the patient applying for Social Security benefits.

Summer Meeting of Council Held In Charleston on June 11

The regular summer meeting of the Council of the West Virginia State Medical Association was held at the Daniel Boone Hotel in Charleston on June 11, 1961, with the chairman, Dr. J. C. Huffman of Buckhannon, presiding.

At the outset of the meeting, it was reported that the Executive Secretary, Charles Lively, was gravely ill. The chairman further stated that Mr. Lively had been recovering satisfactorily following a coronary occlusion on March 30, but that he had suffered numerous complications and his condition had worsened in the past few days.

Due to Mr. Lively's illness, the executive assistant, Mr. William H. Lively, was unable to attend the meeting and the chairman appointed Dr. D. E. Greeneltch of Wheeling, the President Elect, to serve as acting secretary at the meeting.

(Mr. Charles Lively expired on the following day, June 12).

Election of Honorary Members

The Council elected the following physicians to honorary life membership in the West Virginia State Medical Association:

Society	Physician	Address
Boone	W. F. Harless	Madison
Cabell	Oscar B. Biern	Huntington
	H. D. Hatfield	Huntington
Eastern Panhandle	N. B. Hendrix	Martinsburg
Fayette	G. G. Hodges	Mt. Hope
	Charles G. Merriam	Page
Greenbrier Valley	A. D. Ferrell	Lewisburg
	W. E. Myles	White Sulphur Springs
Harrison	R. B. Linger	Bridgeport
Kanawha	B. V. Blagg	South Charleston
	George F. Grisinger	Charleston
Monongalia	E. F. Heiskell	Morgantown
	W. H. Howell	Morgantown
Raleigh	William T. Ruark	Beckley

Doctor Bogarad Named 'GP of the Year'

Dr. Myer Bogarad of Weirton, a past president of the West Virginia Chapter of the American Academy of General Practice, was named by the Council as the State Medical Association's 1961 "General Practitioner of the Year."

Doctor Bogarad will receive the award officially at the second session of the House of Delegates during the annual meeting at The Greenbrier.

Proposed Increase in AMA Dues

Dr. Frank J. Holroyd of Princeton, AMA Delegate, reported that the matter of an increase in AMA dues would be on the agenda of the House of Delegates during the annual meeting in New York City.

He said that the proposed increase would be in the amount of $10, effective January 1, 1962, and an additional $10, effective January 1, 1963, which would bring the total AMA dues to $45.

Doctor Holroyd explained that the proposed increase in dues would finance fifty outright grants per year to medical students, especially to those interested in research. He said another five hundred scholarships, established on a rotating fund basis, would be awarded annually.

After lengthy discussion, the Council instructed the two AMA Delegates, Drs. Holroyd and Charles A. Hoffman, to vote in favor of the increase at the annual meeting in New York City, June 25-30, 1961.

(Subsequently, during the annual meeting of the American Medical Association in New York City, the House of Delegates voted in favor of an increase in annual dues).

Proposed Change in By-Laws

Several proposed changes in the By-Laws of the West Virginia State Medical Association concerning the appointment of a Committee on Nominations were presented by Dr. Albert C. Esposito of Huntington. The proposed amendments, are as follows:

(1) Amend Chapter VIII, Section 1., By-Laws, as follows: Add "Committee on Nominations" to list contained in that Section.

(2) Amend Chapter VIII, Section 5., By-Laws, as follows: The Committee on Nominations shall be appointed prior to the adjournment of the first meeting of the House of Delegates at the Annual State Convention and shall consist of one appointed member, and one alternate, from each Councillor District, together with the current Councillor-at-Large, who shall act as chairman. This Committee shall consider and recommend to the House of Delegates, prior to the election of officers in its final session, its nominee for the office of president-elect, vice president, treasurer and the AMA Delegate and Alternate. Nothing in this Section shall serve to prevent any nominations from the floor for these respective offices.

The Council went on record as approving the proposed amendments and recommended that they be adopted by the House of Delegates during the annual meeting at The Greenbrier in August.

Proposed Controls on Animal Experimentation

Several members of the Council discussed bills that are pending in Congress which would place restrictions and controls on animal experimentation in connection with scientific research.

The Council went on record as being opposed to the bills, and directed the executive assistant to inform the two U. S. Senators and members of the House of Representatives from West Virginia of the opposition of the Council to any measures that would hinder the advancement of medical and scientific research.

Report of School Health Committee

Doctor Huffman read to the Council a report of the School Health Committee of the State Medical Association, which included a set of recommendations adopted by a Sub-Committee on Athletics concerning physical education and athletic programs in secondary schools in the state. The recommendations also included regulations concerning use of trampolines as an amusement device which the Committee hoped would be adopted by local health departments.

Doctor Huffman said that Dr. W. W. Currence of South Charleston, chairman of the School Health Committee, was interested in obtaining the approval of the recommendations by the Council, as well as the Coaches Association and Secondary Principals Association.

The Council went on record as approving the report, and also approved two additional recommendations suggested by Dr. J. C. Pickett.

Pre-Convention Meeting of the Council

It was announced that the pre-convention meeting of the Council would be held at The Greenbrier in White Sulphur Springs on Wednesday afternoon, August 23, at four o'clock.

Dr. J. C. Huffman of Buckhannon, Chairman of the Council, presided at the meeting in Charleston which was attended by Dr. George F. Evans of Clarksburg, Councillor-at-Large; Dr. John W. Hash of Charleston, President; Dr. D. E. Greeneltch of Wheeling, President Elect; Dr. Daniel N. Barber of Charleston, Treasurer; and Drs. Paul P. Warden of Grafton; Richard E. Flood of Weirton; S. Elizabeth McFetridge of Shepherdstown; J. C. Pickett of Morgantown; Richard V. Lynch, Jr., of Clarksburg; C. R. Davisson of Weston; Charles L. Goodhand of Parkersburg; Albert C. Esposito of Huntington; Ward Wylie of Mullens; Harold Van Hoose of Man; and Clyde A. Smith of Beckley.

The meeting was also attended by Drs. Frank J. Holroyd of Princeton and Charles A. Hoffman of Huntington, AMA Delegates; Dr. Thomas G. Reed of Charleston, AMA Alternate; Dr. N. H. Dyer of Charleston, Director of the State Department of Health; Dr. Walter E. Vest of Huntington, Editor of *The Journal;* and Dr. James S. Klumpp of Huntington, Parliamentarian.

American Hospital Assn. Meeting In Atlantic City, Sept. 25-28

More than 12,000 persons are expected to attend the 63rd annual meeting of the American Hospital Association which will be held in Atlantic City, New Jersey, September 25-28. The theme for the meeting is "Hospitals in a Changing America."

The House of Delegates, policy-making body of the Association, will hold its sessions at the Traymore Hotel. Program sessions will be held in Convention Hall, and more than 500 exhibits will also be housed there.

Elvis J. Stahr, Jr., Secretary of the Army and former President of West Virginia University, will be the guest speaker at a luncheon meeting of the Federal Hospital Executives'. Another featured speaker will be Dr. Leonard W. Larson of Bismarck, North Dakota, president of the American Medical Association.

Dr. Jack Masur, Director of the Clinical Center, National Institutes of Health, Bethesda, Maryland, will be installed as president of the organization during the meeting. He will succeed Frank S. Groaner, Administrator of Baptist Memorial Hospital, Memphis, Tennessee.

Two State Physicians Certified

Two West Virginia physicians, Dr. Harvey S. Klein of Huntington and Dr. Chester L. Wagstaff of Williamson, were recently certified by the American Board of Obstetrics and Gynecology.

Dr. George M. Fister, Ogden, Utah, Named AMA President Elect

Dr. George M. Fister of Ogden, Utah, was named president elect of the American Medical Association at the annual meeting in New York City, June 25-30. He was elected by the House of Delegates at the concluding session at the Statler Hilton Hotel on June 29.

Doctor Fister will succeed Dr. Leonard W. Larson of Bismarck, North Dakota, who was installed as president on Tuesday evening, June 27.

Dr. Eustace A. Allen of Atlanta, Georgia, was elected vice president, and Drs. Norman a Welch of Boston and Milford O. Rouse of Dallas, were reelected speaker and vice speaker of the House of Delegates, respectively.

Dr. Hugh Hussey Board Chairman

Dr. Hugh Hussey of Washington, D. C., was elected chairman of the Board of Trustees to succeed Dr. Julian Price of Florence, South Carolina. Dr. Percy Hopkins of Chicago was named vice chairman and the secretary is Dr. James Z. Appel of Lancaster, Pennsylvania.

Elected to the Board of Trustees were Dr. Wesley W. Hall of Reno, Nevada, to succeed Doctor Fister; Dr. Homer L. Pearson, Jr., of Miami, Florida, to replace Doctor Price; and Dr. Charles L. Hudson of Cleveland, Ohio, to fill out the term of the late Dr. Cleon A. Nafe of Indianapolis.

Dr. Walter E. Vest of Huntington was reelected a member of the Council on Constitution and By-Laws.

Named to the Judicial Council were Dr. Robertson Ward of San Francisco, to succeed himself, and Dr. Elmer G. Shelley of North East, Pennsylvania, to replace Doctor Pearson.

Record Registration

Total registration at the three-day meeting was 64,679, including 23,083 physicians. This exceeded the previous high registration of 55,847 in connection with the 1957 annual meeting, also held in New York City.

Clinical Meeting in Denver

The 1961 Clinical Meeting of the AMA will be held in Denver, Colorado, November 27-30. Other meetings are scheduled as follows:

1962 Annual Meeting, Chicago, June 11-15; 1962 Clinical Meeting, Los Angeles, November 25-29; 1963 Annual Meeting, Atlantic City; 1963 Clinical Meeting, Portland, Oregon; 1964 Annual Meeting, San Francisco; and 1965 Annual Meeting, New York City.

ACCP Course in Chicago, Oct. 23-27

The 16th annual postgraduate course in clinical cardiopulmonary physiology, sponsored by the American College of Chest Physicians, will be held at the Sheraton-Chicago Hotel in that city, October 23-27.

Registration fee, which includes luncheon meetings, will be $75 for members and $100 for non-members. Additional information may be obtained by writing the American College of Chest Physicians, 112 East Chestnut Street, Chicago 11, Illinois.

Doctor Vest Reelected Member Of Key AMA Council

A large number of West Virginia physicians attended the 110th Annual Meeting of the American Medical Association in New York City, June 25-30. The Statler Hilton was the headquarters hotel and scientific sessions were conducted at the Coliseum.

Walter E. Vest, M. D.

Heading the state delegation were Drs. Frank J. Holroyd of Princeton and Charles A. Hoffman of Huntington, AMA delegates, and Drs. J. C. Huffman of Buckhannon and Thomas G. Reed of Charleston, alternates. Other officers present were Dr. John W. Hash of Charleston, president; Dr. D. E. Greeneltch of Wheeling, president elect; and Dr George F. Evans of Clarksburg, Councillor-at-Large.

Dr. Vest Reelected Member of AMA Council

Dr. Walter E. Vest of Huntington was reelected a member of the AMA Council on Constitution and By-Laws during the final session of the House of Delegates on Thursday, June 29.

Doctor Vest, who is a past president of the West Virginia State Medical Association and the Southern Medical Association, served for 24 years as an AMA delegate before retiring in 1958. He also is Editor of *The West Virginia Medical Journal.*

Summary of New York City Meeting

The following summary of the New York City meeting was prepared for publication by Dr. F. J. L. Blasingame, executive vice president of the American Medical Association:

Osteopathy, medical discipline, communications, surgical assistants, drug legislation, general practice residencies, relations with allied health professions and services, and poliomyelitis vaccine were among the major subjects covered by 115 resolutions and 28 reports acted upon by the House of Delegates at the American Medical Association's 110th Annual Meeting in New York City, June 25-30.

Dr. George M. Fister of Ogden, Utah, member of the AMA Board of Trustees and previously a member of the House of Delegates, was named president-elect of the Association. Doctor Fister will become president at the June, 1962, annual meeting in Chicago, succeeding Dr. Leonard W. Larson of Bismarck, North Dakota, who assumed office at an inaugural ceremony in New York on June 27.

The AMA 1961 Distinguished Service Award was awarded to Dr. Walter H. Judd of Minneapolis, physician and member of Congress, for his contributions as a medical missionary, humanitarian and statesman devoted to world peace.

Osteopathy

In considering a report of the Judicial Council and three resolutions on the subject of osteopathy, the House of Delegates agreed with the intent of the report and resolutions, but instead adopted the following statement of AMA policy:

"1. There can never be an ethical relationship between a doctor of medicine and a cultist, that is, one who does not practice a system of healing founded on a scientific basis.

"2. There can never be a majority party and a minority party in any science. There cannot be two distinct sciences of medicine or two different, yet equally valid systems of medical practice.

"3. Recognition should be given to the transition presently occurring in osteopathy, which is evidence of an attempt by a significant number of those practicing osteopathic medicine to give their patients scientific medical care. This transition should be encouraged so that the evolutionary process can be expedited.

"4. It is appropriate for the American Medical Association to *reappraise its application of policy* regarding relationships with doctors of osteopathy, in view of the transition of osteopathy into osteopathic medicine, in view of the fact that the colleges of osteopathy have modeled their curricula after medical schools, in view of the almost complete lack of osteopathic literature and the reliance of osteopaths on and use of medical literature, and in view of the fact that many doctors of osteopathy are no longer practicing osteopathy.

"5. Policy should now be applied individually at state level according to the facts as they exist. Heretofore, this policy has been applied collectively at national level. The test now should be: Does the individual doctor of osteopathy practice osteopathy, or does he in fact practice a method of healing founded on a scientific basis? If he practices osteopathy, he practices a cult system of healing and all voluntary professional associations with him are unethical. If he bases his practice on the same scientific principles as those adhered to by members of the American Medical Association, voluntary professional relationships with him should not be deemed unethical."

Medical Discipline

In a major move designed to strengthen the profession's disciplinary mechanisms, the House approved the conclusions and recommendations of the Medical Disciplinary Committee, with only three word changes. The House discharged the committee with thanks and commendation and directed that its functions be assumed as a continuing activity of the Judicial Council.

One recommendation suggests that "The bylaws of the American Medical Association be changed to confer original jurisdiction on the Association to suspend or revoke the AMA membership of a physician guilty of a violation of the Principles of Medical Ethics or the ethical policy of the American Medical Association regardless of whether action has been taken against him at local level."

Another "encourages and urges that each state association report annually to the American Medical Association all major disciplinary actions taken within its jurisdiction during the preceding calendar year."

The report urged state and county medical societies to utilize grievance committees as "grand juries" to initiate action against an offender so as to obviate the necessity of making an individual member of a medical society complain against a fellow member.

The House suggested that each medical school develop and present a required course in ethics and socio-economic principles, and that each state board of medical examiners include questions on ethics and proper socio-economic practices in all examinations for license.

The report concluded with a recommendation that "American medicine at the national, state and local level maintain an active, aggressive and continuing interest in medical disciplinary matters so that, by a demonstration of good faith, medicine will be permitted to continue to discipline its own members when necessary."

Communications

Acting upon four resolutions related to the Association's public relations program, the House adopted a substitute resolution directing the Speaker of the House of Delegates to name seven elected members of the House as a special committee "to study and continually advise the Board of Trustees on the board planning and coordination of all phases of communications of the American Medical Association, so that the public and the members of the medical profession are properly and adequately advised of the policies and concern of the medical profession with respect to all phases and aspects of medical care for all people."

The House agreed with a reference committee opinion that "we have a very adequate Division within the AMA capable of implementing any program of communications." The approved committee report also said that "the Communications Division of the AMA needs the active support and cooperation of the House and of all members of the Association."

Surgical Assistants

In considering a Board report and two resolutions on the subject of surgical assistant's fees, the House approved the following five basic principles developed by the Judicial Council and the Council on Medical Service:

"1. Each member of the AMA is expected to observe the Principles of Medical Ethics in every aspect of his professional practice.

"2. Each doctor engaged in the care of the patient is entitled to compensation commensurate with the value of the services he has personally rendered.

"3. No doctor should bill or be paid for a service which he does not perform; mere referral does not constitute a professional service for which a professional charge should be made or for which a fee may be ethically paid or received.

"4. It is ethically permissible for a surgeon to employ other physicians to assist him in the performance of a surgical procedure and to pay a reasonable amount for such assistance.

"This principle applies whether or not an assisting physician is the referring doctor and whether he is on a per-case or full-time basis. The controlling factor is the status of the assisting physician. If the practice is a subterfuge to split fees or to divide an insurance benefit, or if the physician is not actually employed and used as a bona fide assistant, then the practice is contrary to ethical principles.

"5. Under all other circumstances where services are rendered by more than one physician, each physician should submit his own bill to the patient and be compensated separately."

Efficacy of Drugs

The House strongly endorsed a Board report which pointed out the problems that would result from amending the Food, Drug and Cosmetic Act to authorize the Food and Drug Administration to determine the efficacy, as well as the safety, of a prescription drug prior to the approval of a new drug application. The AMA will oppose such legislation before the Kefauver Committee, the report pointed out, on the basis that "a decision with respect to the effectiveness of drugs is dependent upon extended research, experimentation and usage." The House agreed that vesting such authority in the Food and Drug Administration would operate to limit research, the marketing of drugs and the exercise of discretion by the medical profession. "The marketing of a relatively useless drug is infinitely less serious than would be the arbitrary exclusion from the market of a drug that might have been life saving for many persons," the House declared.

Shown at a breakfast meeting of the Aces and Deuces organization in New York City during the AMA meeting in June are, left to right, Dr. John W. Hash of Charleston, Mrs. J. C. Huffman of Buckhannon, Mrs. Hash, Doctor Huffman, and Dr. and Mrs. Frank J. Holroyd of Princeton. Doctor Holroyd was reelected to a third term as secretary-treasurer of the Aces and Deuces.

General Practice Residencies

Eight resolutions were introduced on the subject of creating new two-year residency training programs in general practice. The House agreed that there appears to be a need for such programs for those individuals who desire more experience in obstetrics and surgery than may be available in the currently existing Family Practice Program. It approved a sub-

stitute resolution directing the Council on Medical Education and Hospitals to consider for approval other two-year programs in general practice which incorporate experience in obstetrics and surgery. The Council will review these programs on the basis of their individual merits and conduct a long-range evaluation of the new programs as well as the previously established Family Practice Programs.

Relations With Other Health Professions and Services

The House considered a Board report and twelve resolutions dealing with various aspects of medicine's relationships with allied health professions and services, including optometry. The Board report recommended the creation of a new AMA Council to handle all the problems involved. The House, however, accepted a reference committee suggestion for establishment of a new Commission to Coordinate the Relationships of Medicine with Allied Health Professions and Services. The Commission will be composed of seven members appointed by the Speaker of the House. Subcommittees, composed of from three to five members selected by the Commission from lists of names submitted by the scientific sections, will consider problems in specific areas. The Commission will correlate and catalogue the reports of the sub-committees and will act as liaison agent between the sub-committees and those AMA councils where there may be overlapping interests.

Other West Virginians attending the Aces and Deuces breakfast included, left to right, Dr. and Mrs. Charles A. Hoffman of Huntington, Dr. and Mrs. D. E. Greeneltch of Wheeling, and Dr. and Mrs. Thomas G. Reed of Charleston.

Polio Vaccine

The House approved a report by the Council on Drugs on the present status of poliomyelitis vaccination in the United States and urged that it be made available to all physicians through the most effective communications media. The report clearly outlines procedures recommended for implementation of mass vaccination with the new oral vaccine when it becomes available. The House complimented the Council on its "clear and succinct statement on the initiation of the new campaign which will be needed to promote the new vaccine." The House agreed that the report provides the practicing physician with a reliable series of answers to the many questions which will arise during the change-over from Salk vaccine to oral vaccine. The report emphasizes, however, that "physicians should encourage, support and extend the use of Salk vaccine on the widest possible scale at least until the oral polio-virus vaccines currently under development and clinical trial become available."

Miscellaneous Actions

In dealing with resolutions and reports on a wide variety of other subjects, the House also:

Approved the "Guides to Physician Relationships with Medical Care Plans," submitted by the Council on Medical Service, with these two changes: deletion of item 5 under "Responsibilities of the Medical Society," which said "to recognize that properly qualified physicians employed by, or otherwise serving, medical care plans should not be denied professional rights and privileges because of their service to such plans," and addition of a new item 1 under "Responsibilities of the Medical Care Plan," which reads: "To provide the beneficiary of the plan with free choice of qualified physicians";

Reaffirmed its support of the Kerr-Mills program for the needy and near-needy aged and its opposition to any legislation of the King-Anderson type, declaring that the medical profession "will not be a willing party to implementing any system which we believe to be detrimental to the public welfare";

Approved a markedly expanded drug information program submitted by the Board of Trustees and the Council on Drugs;

Adopted the final report of the Special Study Committee of the Council on Medical Education and Hospitals and recommended that copies be sent to all medical school deans in the United States;

Decided to hold the 1963 Clinical Meeting in Portland, Oregon, instead of Las Vegas, Nevada, as recommended by the Board;

Approved a plan by the new AMA Department of International Health to cooperate in the recruitment of volunteer physicians for emergency medical service in foreign mission fields;

Agreed to an increase of $20 in annual AMA membership dues to be implemented over a period of two years: $10 on January 1, 1962, and $10 additional on January 1, 1963;

Discontinued the Association's General Practitioner of the Year award;

Opposed legislative and administrative mandates which would compel physicians to prescribe drugs, or require pharmaceuticals to be sold, by generic names only;

Reaffirmed the Association's opposition to compulsory inclusion of physicians under the Social Security system;

Urged immediate legislation that will provide strong economic motivation for the construction and maintenance of fallout shelters;

Disapproved two resolutions which would have discontinued the scientific activities at the Clinical Meeting:

Urged immunization campaigns against both tetanus and influenza, and asked state and county medical

societies to give full support to the First National Congress on Medical Quackery to be jointly sponsored next October 6-7 in Washington, D. C., by the AMA and the Food and Drug Administration.

Opening Session

At the opening session on Monday, Dr. E. Vincent Askey of Los Angeles, retiring AMA president, challenged physicians and medical organizations to reexamine their own efforts to strengthen and improve medicine, and he warned against defeatism and failure to accept personal responsibility for answering criticisms. Doctor Larson, the president-elect, called on the profession to strengthen methods of self-discipline in both the state and county societies, adding that physicians must be concerned with improper or incompetent practice and unethical actions of all kinds. The 1961 Goldberger Award in Clinical Nutrition was presented to Dr. Frederick J. Stare, chairman of the Department of Nutrition at Harvard Medical School.

Inaugural Ceremony

Doctor Larson, in his inaugural address Tuesday night, said that the really good doctor, guided by the professional spirit, will always remember that medicine exists for just one purpose—to serve humanity. When the essence of that spirit is diluted or destroyed, either in an individual physician or in a nation, he added, medicine ceases to be a profession in the highest sense of the word. Doctor Larson also presented the Distinguished Service Award medal to Representative Judd.

ACP Course in Columbus, Sept. 18-23

The American College of Physicians will sponsor a postgraduate course on "Changing Concepts of Cardiopulmonary Disease" at the Ohio State University Health Center in Columbus, September 18-23. The course will concern itself primarily with new concepts of the pathologic physiology underlying cardiopulmonary disease and the bearing of these changing ideas on therapy.

Registration will be limited to 75. Further information may be obtained by writing Edward C. Rosenow, Jr., M. D., Executive Director, American College of Physicians, 4200 Pine Street, Philadelphia 4, Pennsylvania.

PG Assembly at Bethesda, Oct. 2-6

The 13th Postgraduate Assembly in Endocrinology and Metabolism will be held at the National Institutes of Health in Bethesda, Maryland, October 2-6. The five-day meeting will be co-sponsored by the Endocrine Society and the National Institutes of Health and a comprehensive review of clinical endocrine problems and current research activity in these areas will be presented.

Registration fee will be $100 for physicians and $30 for residents and fellows. Enrollment is limited to one hundred. Additional information may be obtained by writing Dr. Roy Hertz, National Institutes of Health, Building 10, Bethesda 14, Maryland.

Dr. Stuart Named Assistant Dean Of WVU School of Medicine

Dr. Edward G. Stuart, Associate Professor of Pathology, was appointed Assistant Dean of the West Virginia University School of Medicine, effective July 1, 1961.

Doctor Stuart, who formerly was a member of the faculty at the University of Virginia School of Medicine, joined the faculty at the WVU School of Medicine a year ago. It is anticipated that he will continue in his teaching capacity as a member of the Department of Pathology and assume his administrative duties on a part-time basis.

He was graduated from West Chester State College in Pennsylvania and also received an M. S. degree from Temple University. He is the holder of two doctoral degrees, a Ph. D. in anatomy from the University of Pennsylvania, and an M. D. degree from Duke University School of Medicine. His medical teaching experience includes service in departments of anatomy, physiology and pathology at Temple, Pennsylvania, Duke and Virginia universities.

In requesting appointment of Doctor Stuart to the position of Assistant Dean of the School, Dean Clark K. Sleeth stated: "The breadth of Doctor Stuart's background provides him with exceptional qualifications for this position. In his work at the West Virginia University School of Medicine he has shown an unusual degree of interest in and knowledge of the broad and fundamental problems of medical education.

"He is genuinely concerned with the educational and personal problems of students as individuals. He has demonstrated an ability to deal effectively with administrative detail and should be able to make increasing contributions to the progress of the Medical School in the position for which he is proposed."

He is married and the father of twin sons.

Dr. Ward Wylie Named Member Of Advisory Committee

President John F. Kennedy has appointed Dr. Ward Wylie of Mullens as a member of the National Advisory Committee on Selection of Physicians, Dentists and Allied Specialists.

The committee serves as an advisory group to the Selective Service System on the selection of physicians, dentists and other specialists for the armed forces.

Doctor Wylie is a member of the Council of the West Virginia State Medical Association and also is a member of the West Virginia State Senate.

NIH Research Grants and Fellowships

The National Institutes of Health announced recently that 269 research grants and 447 fellowships totaling $17,806,557 were awarded during June.

Of the total, $12,339,211 was allocated to support 393 new research grants and fellowship awards. The remaining $5,407,346 was for the continuation of 106 previously approved research grants totaling $3,323,597 and 217 fellowships totaling $2,083,749.

Mrs. Thuss Named President Elect Of AMA Auxiliary

Mrs. Clark K. Sleeth of Morgantown, president of the Woman's Auxiliary to the West Virginia State Medical Association, and Mrs. Vernon L. Dyer of Petersburg, the president elect, headed a large delegation of State Auxiliary members who attended the 38th annual meeting of the Woman's Auxiliary to the American Medical Association in New York City, June 26-29.

Other delegates from the State Auxiliary were Mrs. John W. Hash and Mrs. Hunter Boggs of Charleston, and Mrs. J. C. Huffman of Buckhannon.

Mrs. Harlan English of Danville, Illinois, was installed as president of the organization, succeeding Mrs. William Mackersie of Detroit, Michigan. Other new officers are as follows:

Mrs. William G. Thuss, of Birmingham, Alabama, president elect; Mrs. Paul E. Rauschenbach of Paterson, New Jersey, first vice-president; Mesdames Perry F. Polmann of Middletown, New York, C. Rodney Stoltz of Watertown, South Dakota, W. W. Hubbard of Nashville, Tennessee, and Stanley R. Truman of Oakland, California, regional vice-presidents; Mrs. William H. Evans of Youngstown, Ohio, constitutional secretary; and Mrs. C. R. Pearson of Baraboo, Wisconsin, treasurer.

In her inaugural address, Mrs. English called on members across the country to develop strong local public service programs built on community needs.

She said that physicians wives "must accept the community's challenge for knowledge and honest effort in helping to solve local problems."

A check in the amount of $195,264.22 was presented by the Auxiliary to the American Medical Educational Foundation at a luncheon meeting honoring national past presidents. The organization also voted to contribute $10,000.00 each to the American Medical Research Foundation and the AMA's newly-organized scholarship and honor program.

The speaker at a luncheon meeting held on Tuesday, June 27, was Dr. E. Vincent Askey of Los Angeles, California, immediate past president of the American Medical Association. He urged physicians' wives to help recruit qualified young people into medical careers.

Delegates to the meeting also heard an address by Dr. George E. Gardner of Boston, Massachusetts, Professor of Psychiatry at Harvard Medical School, and a member of the American Medical Association Council on Mental Health, in which he warned that among other things, teenage anxiety over college admissions is becoming a mental health problem in this country.

Other business sessions were devoted to state and national reports, discussions and speeches by medical leaders, and American Medical Association staff personnel.

Auxiliary To Maintain Hospitality Booth

A Hospitality Booth, sponsored by the Woman's Auxiliary to the West Virginia State Medical Association, will be open in the Exhibit Hall during the Annual Meeting at The Greenbrier, August 24-26.

All physicians, their wives and guests are cordially invited to stop at the booth often and to make use of its facilities throughout the three-day meeting.

Coffee will be served at the booth from 8:30 until 5 o'clock on Thursday and Friday, and from 8:30 until noon on Saturday, the final day of the meeting.

Donald L. Taylor of Iowa Named President Elect of MSEA

Donald L. Taylor, executive secretary of the Iowa State Medical Association, was named president elect of the Medical Society Executives Association during the annual business meeting held at the Sheraton-Atlantic Hotel in New York City on Saturday afternoon, June 24.

Frederic W. Fagler of Pittsburgh, executive secretary of the Allegheny County Medical Society, was installed as president succeeding James T. Barnes, executive secretary of the Medical Society of the State of North Carolina. Mr. John C. Foster, executive secretary of the South Dakota State Medical Association, was reelected secretary-treasurer.

Named to the Board of Directors were Aubrey D. Gates, Director of the AMA Field Service Division, and John Hanni, Jr., of Miami, Florida, executive secretary of the Dade County Medical Association.

Doctor Holroyd Reelected Secretary Of Aces and Deuces

Dr. Frank J. Holroyd of Princeton was reelected to a third term as secretary-treasurer of the Aces and Deuces organization at the annual breakfast meeting of the group held at the Statler Hilton Hotel in New York City on June 27. The meeting was attended by more than 170 persons.

Dr. Malcolm E. Phelps of El Reno, Oklahoma, was elected president, succeeding Dr. Charles J. Ashworth of Providence, Rhode Island.

Dr. Walter E. Vest of Huntington, a past president of the organization, gave the invocation. Also attending the breakfast meeting were Mrs. Holroyd, Dr. and Mrs. Charles A. Hoffman of Huntington, Dr. and Mrs. Thomas G. Reed of Charleston, Dr. and Mrs. J. C. Huffman of Buckhannon, Dr. and Mrs. John W. Hash of Charleston, and Dr. and Mrs. D. E. Greeneltch of Wheeling.

The Aces and Deuces is a social organization composed of AMA delegates and alternates from State Medical Associations and Societies which have one or two members in the House of Delegates.

An Aces and Deuces luncheon honoring AMA officers and members of the House of Delegates will be held during the Clinical Session in Denver, Colorado, in November.

Tennessee Physician Heads ACCP

Dr. Hollis E. Johnson of Nashville, Tennessee, was elected president of the American College of Chest Physicians during the 27th annual meeting of that organization in New York City, June 22-26.

Doctor Johnson, who is Professor Emeritus of Clinical Medicine at Vanderbilt University, and Consultant in Clinical Medicine at Meherry Medical School, succeeds Dr. M. J. Flipse of Miami, Florida.

More than 2,000 physicians and guests attended the five-day meeting, which was held at the Commodore Hotel, and on the final day, June 26, at the New York Coliseum. The session at the Coliseum was part of a joint meeting between the ACCP and the Section of Diseases of the Chest of the American Medical Association.

More than 1,100 physicians attended these special sessions which consisted of special discussion groups on various aspects of chest medicine. These discussion groups occupied 36 separate round tables in one room—a sort of medical knowledge market place—a first with the American College of Chest Physicians.

The American College of Chest Physicians is an international society with membership in 50 states as well as in 89 countries and territories.

Relocations

Dr. Henry K. Bobroff, a member of the staff at Man Memorial Hospital for several years, has moved to Albuquerque, New Mexico, where he has accepted an appointment with the Bureau of Indian Health of the United States Public Health Service. Doctor Bobroff was engaged in this type of work from 1934 until he entered the Medical Corps of the U. S. Army in 1953.

* * * *

Dr. James L. Patterson of Logan has moved to Wheelwright, Kentucky, where he will continue in general practice. He also will serve as physician for the Inland Steel Company.

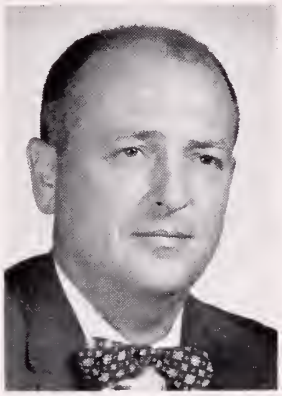
Medical Meetings, 1961

The following is a partial list of national, state and district medical meetings scheduled for 1961:

Aug. 24-26—W. Va. State Medical Association, The Greenbrier, White Sulphur Springs.
Sept. 15—W. Va. Heart Association, Morgantown.
Sept. 22-23—Ohio Chapter, ACS, Cincinnati.
Sept. 25-28—American Hospital Assn., Atlantic City.
Oct. 2-6—Endocrinology PG Course, Bethesda, Md.
Oct. 2-6—Am. Coll. Surgeons, Chicago.
Oct. 5—Rural Health Conference, Jackson's Mill.
Oct. 6-7—Cong. on Medical Quackery, Washington, D. C.
Oct. 11-12—W. Va. TB and Health Assn., Elkins.
Oct. 18—W. Va. St. Nurses Assn., Clarksburg.
Oct. 19-21—W. Va. Hospital Assn., Morgantown.
Oct. 23-24—American Cancer Society, New York City.
Oct. 27-29—PG Institute, Martinsburg.
Nov. 6-9—Southern Medical Assn., Dallas, Texas.
Nov. 11—Pediatric Conference, WVU School of Medicine, Morgantown.
Nov. 13-16—Interstate PG Assembly, Cleveland.
Nov. 13-17—American PH Assn., Detroit, Mich.
Nov. 17-21—National Society for Crippled Children, Denver.
Nov. 27-Dec. 1—AMA Clinical Meeting, Denver.

Medical Golf Tournament At The Greenbrier

A beautiful new trophy offered by the Hospital and Physicians Supply Company of Charleston will be awarded to the winner of the Medical Golf Tournament which will be held in connection with the 94th Annual Meeting of the West Virginia State Medical Association at The Greenbrier in White Sulphur Springs, August 24-26.


Joseph A. Smith, M. D.

Dr. Joseph A. Smith of Dunbar, chairman of this year's golf committee, announced that the new trophy will replace the one retired last year by Dr. Joseph T. Mallamo of Fairmont. Doctor Mallamo has won the tournament the past three years and he will attempt to win the first leg on the new trophy.

Doctor Smith said that physicians participating in the tournament will pay an entrance fee of $5, payable at the time they register for play in the tournament. There will be several prizes in addition to the championship trophy.

Physicians may engage in tournament play both mornings and afternoons during the three-day meeting. Participants are to inform the starter when they begin their official tournament round. All tournament play must be completed by four o'clock on Saturday afternoon, August 26.

Ohio Chapter, ACS, To Meet in Cincinnati

The sixth annual meeting of the Ohio Chapter of the American College of Surgeons will be held at the Netherland-Hilton Hotel in Cincinnati, Ohio, September 22-23. Dr. Vinton E. Siler of Cincinnati, chairman of the program committee, has announced that the program will include the presentation of papers by several out-of-state speakers, together with those to be presented by Ohio surgeons.

Further information concerning the meeting may be obtained by writing Dr. Elmer R. Maurer, Publicity Chairman, 827 Union Central Bldg., Cincinnati 2, Ohio.

Final Goal—Good Medicine

The latest medical discoveries are so dramatically emphasized to the public that they seem almost commonplace. This publicity has often failed to portray the humanitarian side of medicine which existed long before there was much science connected with it. Let it be known that we not only have the best trained doctors in the world, but a devout interest in seeing that good medical care is available to all—regardless of age or financial condition, and that we are able leaders in a constructive way in providing the one service we know more about than any other group—good medical care.—Edwin H. Artman, M. D., in The Ohio State Medical Journal.

Woman's Auxiliary Completes Program For 37th Annual Meeting

Mrs. Clark K. Sleeth of Morgantown, President of the Woman's Auxiliary to the West Virginia State Medical Association, will preside during the 37th annual meeting of the Auxiliary at The Greenbrier in White Sulphur Springs, August 24-26.

Mrs. Kalford W. Howard

More than 200 wives of physicians are expected to attend the three-day meeting, which will be held in conjunction with the 94th Annual Meeting of the West Virginia State Medical Association.

Mrs. William G. Thuss of Birmingham, Alabama, who was named president elect of the Woman's Auxiliary to the American Medical Association during the annual meeting of that organization in June, will be among the guest speakers and will deliver the keynote address at the opening session on Thursday morning, August 24.

Another prominent guest will be Mrs. Kalford W. Howard of Portsmouth, Virginia, president of the Woman's Auxiliary to the Southern Medical Association. She will deliver an address before the second session on Friday morning, August 25.

Pre-Convention Meeting

Mrs. Clark K. Sleeth, the president, will preside at a pre-convention meeting of the Executive Board which will be held at 4 o'clock on Wednesday afternoon, August 23, the day preceding the formal opening of the convention.

All Auxiliary members are invited to attend the first session of the Association's House of Delegates, which will be held that same evening. Dr. John W. Hash of Charleston, the president, will present his presidential address at that session.

Governor Barron Guest Speaker

Physicians, wives and their families are invited to hear an address by Governor W. W. Barron at the Association's first general session in the Theatre at 9:15 o'clock on Thursday morning. It will mark Governor Barron's first appearance at an annual meeting of the State Medical Association.

General Business Sessions

The two general business sessions will be held on Thursday and Friday mornings, leaving the afternoons free for committee meetings and participation in the golf, tennis, bridge and other tournaments arranged in connection with the meeting.

The formal opening of the Auxiliary convention is scheduled for Thursday morning, with the president, Mrs. Clark K. Sleeth, presiding.

The feature of the opening session will be the keynote address by Mrs. William G. Thuss, president elect of the AMA Auxiliary.

Mrs. Thuss, who has been active in auxiliary work for more than thirty years, is a native of Nashville, Tennessee, and was graduated from Vanderbilt University.

She served a term as president of the Woman's Auxiliary to the Alabama State Medical Association in 1955 and served as co-chairman of organization for the AMA Auxiliary, 1954-56. She served as a director of the organization, 1956-58, and was Southern Regional Vice President, 1958-60.

Her husband is an industrial surgeon, and they have three sons, two of whom are physicians. They have six grandchildren.

Mrs. Thuss has been actively engaged for many years in activities of the American National Red Cross, American Cancer Society, and the League for Nursing. She is a charter member of the Woman's Auxiliary to the International College of Surgeons and the Southeastern Surgical Congress.

Reports To Be Received

The heavy agenda at the first session will include reports of convention committees and recommendations of the Executive Board. Reports of county auxiliary presidents will also be received, together with reports of the officers and the standing and special committees.

There will be a bridge party in the Trellis Lobby, a naturalist tour, and a tour of the Alabama Arts Colony on Thursday afternoon.

Election of Officers on Friday

Mrs. Robert R. Pittman of Marlinton, immediate past president, will preside at the annual Past Presidents' Breakfast which will be held at 8:00 o'clock on Friday morning.

The second general session will be held at 9:30 A. M. on Friday, with Mrs. Clark K. Sleeth presiding. In addition to receiving reports of various committees, new officers will be elected for the coming year following a report of the nominating committee.

Dr. Philip Thorek Guest Speaker

The first speaker at the Friday morning session will be Dr. Philip Thorek of Chicago, Clinical Associate Professor of Surgery at the University of Illinois College of Medicine, and he will discuss "Nutrition and Diet."

Doctor Thorek appeared as a speaker before the Auxiliary several years ago. He will present several other papers in connection with the scientific program arranged by the State Medical Association.

Mrs. William G. Thuss will install the newly elected officers and the presentation of the president's pin and gavel will be made by Mrs. Clark K. Sleeth. The presentation of the past president's pin will be made by Mrs. Robert R. Pittman.

Address by Mrs. Vernon L. Dyer

Mrs. Vernon L. Dyer of Petersburg, who will be installed as president, will deliver her inaugural address following the installation ceremonies.

The program that morning will also include an address by Mrs. Kalford W. Howard, president of the

Woman's Auxiliary to the Southern Medical Association. She was born in Portsmouth, Virginia, and was graduated from State Teachers College in Farmville, Virginia.

She is a past president of the Woman's Auxiliary to the Norfolk County Medical Society, and has served as treasurer and president of the Woman's Auxiliary to the Medical Society of Virginia. Prior to her election as president elect of the Woman's Auxiliary to the Southern Medical Association, she served as treasurer and vice president.

Her husband received his M. D. degree from the University of Virginia School of Medicine.

Mrs. Howard was "Woman of the Year" in Portsmouth in 1957.

Luncheon and Fashion Show

Following adjournment of the second general session on Friday morning, there will be a luncheon and fashion show in the Crystal Dining Room for members and guests. Fashions will be shown by the Floradora Shoppe of Morgantown. Mrs. D. Franklin Milam of Morgantown is in charge of arrangements.

Mrs. Clark K. Sleeth
President

Golf and tennis tournaments will be held that afternoon.

Cabaret Dance at the Casino

A Cabaret Dance, sponsored by the Auxiliary, will be held at the Casino on Friday evening, beginning at 10:00 o'clock. Honor guests will be introduced and prizes will be awarded to winners in the golf and tennis tournaments.

Post-Convention Conference

There will be a post-convention conference and meeting of the Executive Board on Saturday morning at 10:00 o'clock, with Mrs. Vernon L. Dyer presiding. This meeting will be the final item of business on the formal program.

Second Session House of Delegates

Auxiliary members are cordially invited to attend the second session of the Association's House of Delegates at 3:30 o'clock on Saturday afternoon, at which time the guest speaker will be Dr. Leonard W. Larson of Bismarck, North Dakota, president of the American Medical Association.

The session will also feature introductions of West Virginia's "General Practitioner of the Year" and the recipient of the State Medical Association's 1961 four-year scholarship to the West Virginia University School of Medicine. The business session will include the election of officers for the coming year.

Dr. Edward R. Annis Guest Speaker

Dr. Edward R. Annis of Miami, Florida, who has won renown for his nationally televised debates with Walter Reuther and Senator Hubert Humphrey, has accepted an invitation to appear as speaker at the Presidential Dinner, honoring Dr. Leonard W. Larson, President of the American Medical Association, which will be held in the Crystal Dining Room on Saturday evening, August 26. All members of the Auxiliary, State Medical Association, exhibitors and guests are invited to attend.

A cocktail party and reception honoring the officers of the West Virginia State Medical Association will be held on the Chesapeake Hall Terrace from 6:30 to 7:30 o'clock that evening.

Dance for High School and College Guests

A Dancing Party for high school and college guests will be held at Kate's Mountain Lodge on Saturday evening, beginning at 8 o'clock. Hosts will be John and Dick Hash of Charleston. Transportation will be furnished.

The Auxiliary will sponsor a Hospitality Booth in the exhibit hall during the three-day meeting. All physicians, their wives and guests are invited to stop at the booth often and to make use of the facilities throughout the meeting.

Coffee will be served at the booth from 8:30 until 5:00 on Thursday and Friday, and from 8:30 until noon on Saturday, the final day of the meeting.

Convention Committees

Mrs. Robert J. Nottingham of Morgantown is convention chairman and Mrs. Robert J. Fleming, also of Morgantown, co-chairman.

Mrs. Clark K. Sleeth, the president, has also named the following members to serve as Hostesses:

Mrs. J. C. Huffman of Buckhannon, Chairman, and Mesdames Vernon L. Dyer of Petersburg, Ross P. Daniel of Beckley, George F. Evans of Clarksburg, Pat A. Tuckwiller of Charleston, Seigle W. Parks of Fairmont, Charles L. Goodhand of Parkersburg, G. Thomas Evans of Fairmont, Buford W. McNeer of Hinton, Joe N. Jarrett of Oak Hill, Harold Van Hoose of Man, Claude R. Davisson of Weston, James E. McClung of Richwood, C. Vincent Townsend of Martinsburg, George A. Curry of Morgantown, and Harry E. Beard of Huntington.

Record Investment in Research By Drug Manufacturers

A record $206.5 million investment in research was made last year by drug manufacturers in the search of new cures for human ailments. The new high was reached despite a general down-turn in profits according to the annual survey on research and development made public recently by the Pharmaceutical Manufacturers Association. The 1959 figure was $197 million.

Research expenditures this year will rise to about $227 million for human drugs, the trade association reported. This year's sum is a 276 per cent increase over 1951, when companies reported spending $60 million.

"This represents a $16.7 million average annual increase in industry expenditures for research," the report said. "These figures are in marked contrast to the rate of growth in output by the United States economy: gross national product in the same period increased only 52 per cent from $329 billion to a current rate of $500 billion."

An additional $5.4 million was spent in 1960 for research and development of veterinary drug products, and this figure is expected to rise during 1961 to $5.8 million.

The rapidly expanding research activity is "an index to the highly competitive search for breakthrough discoveries to combat many common ailments—notably cancer and cardiovascular disease," said Dr. Austin Smith, president of the Association.

A measure of the importance attached to research by the industry is the composite total of its expenditures since 1948, the first year in which it spent as much as $30 million for this kind of activity. Through 1960 the total comes to more than $1¼ billion.

The published annual reports for eleven major drug firms showed a net increase in sales but a drop in net profits of 3.6 per cent for 1960. Despite the decline in profits, they plowed back 7.7 per cent of income into research. Doctor Smith said, "There is no evidence to indicate that the profit experience of the rest of the industry was any different."

Daywood Art Gallery In Lewisburg

Physicians, their wives and guests attending the annual meeting at The Greenbrier in August have been extended a cordial invitation to visit the Daywood Art Gallery in nearby Lewisburg. The Gallery is open daily, except Sunday, from 1:00-5:00 P. M. Admission is free.

Thousands of visitors from this country and abroad have visited the Gallery since its opening in 1951. It was established by Ruth Woods Dayton in memory of her husband Arthur Spencer Dayton, an attorney and collector of art and rare books.

Exhibited in a homelike atmosphere of English and American antique furnishings are 75 paintings and 145 etchings by nationally recognized artists.

Proposed Constitutional Amendment

The following amendment to the Constitution of the West Virginia State Medical Association, offered at the 93rd Annual Meeting at The Greenbrier in White Sulphur Springs, August 25-27, 1960, by James P. McMullen, M. D., of Wellsburg, Chairman of the Committee on Constitution and By-Laws, will be acted upon finally by the House of Delegates at the 94th Annual Meeting in 1961:

Article IX

Sec. 3—Amend the Section in line one by deleting the word "President."

(The effect of the amendment would be to eliminate the necessity of electing a president at each annual meeting. Section 2 of Chapter VI of the By-Laws provides that the president elect shall be installed as president as the final order of business at the last session of the House of Delegates at each annual meeting).

Assurance

In the approach to social problems the physician has always regarded with sympathy the requirements of the individual to be helped. Therefore, in all discussions concerning care of the aged, he has understanding and sympathy with the recognition of the need for a change. He realizes that desire for security is a natural urge of the human and that what is happening here is going on all over the world.

However, the physician must be concerned about the whole idea of insuring oneself against every contingency. It would seem to indicate a vital lack of interest in each other. The physician of today must have large malpractice insurance, large automobile insurance and so on, because of the predatory attitude of one human being toward another. Even the attitude of one physician to another has been subjected to a change. About fifty percent of the physicians in the county who have Blue Cross Insurance also have Blue Shield. It has always been understood that physicians will look after each other without charge, but apparently even here a change is occurring.

It is evident that the older person feels acutely that the family group today no longer is adequate or indeed willing to assume responsibility for his care. A government agency is a poor substitute for the family group, but this is apparently what is wanted. Whatever the solution is as far as medical care is concerned, it seems far more important that the growing aging population be made to feel self-sufficient, with the aim always toward self help and self support.

Basically, usefulness to himself and to others provides a happy life for most individuals—old as well as young.—Westchester Medical Bulletin.

The Weeders, Van Gogh, Bernard Koehler Collection, Berlin

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Essential in moving external masses, but potentially dangerous in moving the bowels, since vascular accidents may be precipitated in heart patients by excessive straining at stool. For cardiac patients with constipation, Metamucil adds a soft, bland bulk to the bowel contents to stimulate normal peristalsis and also to hold water within stools to keep them soft and easy to pass. Thus Metamucil, with an adequate water intake, induces natural elimination with a minimum of straining. Metamucil also promotes regularity through "smoothage" in all types of constipation.

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SEARLE

CONVENTION PROGRAM

94th Annual Meeting

of the

West Virginia State Medical Association

THE GREENBRIER, WHITE SULPHUR SPRINGS
August 24-26, 1961

WEDNESDAY AFTERNOON

August 23

(Eastern Standard Time)

2:30-4:30—Registration, Main Floor Lobby.

2:00—Cancer Committee. T. P. Mantz, M. D., *presiding.* (Jackson Room).

2:00—Constitution and By-Laws Committee. Buford W. McNeer, M. D., *presiding.* (Arthur Room).

3:00—Medical Economics Committee. James S. Klumpp, M. D., *presiding.* (Buchanan Room).

4:00—Pre-Convention Meeting of the Council. J. C. Huffman, M. D., *presiding.* (Lee Room, Virginia Wing).

WEDNESDAY EVENING

8:30-9:30—Registration.

9:00—First Session of the House of Delegates. John W. Hash, M. D., *presiding.* (Fillmore and Van Buren Rooms).

Presidential Address—John W. Hash, M. D., President, West Virginia State Medical Association.

Business Meeting.

THURSDAY MORNING

August 24

8:20—Motion Picture. Ralph H. Nestmann, M. D., in charge. (Theatre). "The Disability Decision."—How your patient's claim for disability is processed at the local, state and national levels.

8:30-5:00—Registration, Main Floor Lobby.

Opening Exercises—Theatre

9:00—Call to Order—Halvard Wanger, M. D., Chairman, Program Committee.

Invocation—Walter E. Vest, M. D.

Address of Welcome—John W. Hash, M. D., President, West Virginia State Medical Association.

Address by Governor W. W. Barron.

First General Session—Theatre

Moderator: Hu C. Myers, M. D.

9:45—Edward L. Compere, M. D., Professor and Head of the Department of Orthopedic Surgery, Northwestern University School of Medicine, Chicago, Illinois. Subject: "Helpful Hints to the Doctor in General Practice."

10:30—Recess for Visiting Exhibits.

11:00—Rubin H. Flocks, M. D., Professor and Head of the Department of Urology, State University of Iowa College of Medicine, Iowa City, Iowa. Subject: "Prostatism."

11:45—Philip Thorek, M. D., Clinical Associate Professor of Surgery, University of Illinois College of Medicine, Chicago. Subject: "Diseases of the Esophagus in General Practice."

12:30—Recess for Lunch and Visiting Exhibits.

THURSDAY AFTERNOON

August 24

2:00—Resolutions Committee. Pat A. Tuckwiller, M. D., *presiding.* (Washington Room).

2:00—Section on Orthopedic Surgery. George R. Callender, Jr., M. D., *presiding.* (Tyler Room).
Guest Speaker: Edward L. Compere, M. D., Chicago, Illinois. Subject: "The Causes and Prevention of Pseudarthrosis in the Treatment of Fractures."

2:00—Section on Urology. B. B. Richmond, M. D., *presiding.* (Jackson Room).
Guest Speaker: Rubin H. Flocks, M. D., Iowa City, Iowa. Subject: "Some Aspects of Pediatric Urology."

2:00—Open Meeting, West Virginia State Society of Allergy. (Fillmore and Van Buren Rooms).
Address of Welcome—Marshall J. Carper, M. D., President of the Society.

Scientific Program with Merle S. Scherr, M. D., as *Moderator*.

Guest Speakers: Homer E. Prince, M. D., Crockett, Texas. Subject: "A Practical Approach to Mold Allergy."

Philip Blank, M. D., Pittsburgh. Subject: "Atopic Dermatitis."

Jose M. Quintero, M. D., San Juan, Puerto Rico. Subject: "Physiopathological Considerations on Bronchial Asthma."

Panel Discussion and Question and Answer Period.

4:00—WVU Liaison Committee. George F. Evans, M. D., *presiding*. (Buchanan Room).

THURSDAY EVENING

6:30—Cocktail Party, West Virginia Chapter, Medical College of Virginia Alumni Association. John A. B. Holt, M. D., in charge. (West Virginia Room).

10:00—Dancing in the Ballroom.

FRIDAY MORNING

August 25

8:20—Motion Pictures. Ralph H. Nestmann, M. D., in charge. (Theatre). "The Surgical Treatment of Mitral Stenosis by an 'Open' Technique," and "Anti-TB Drugs in the Medical and Surgical Treatment of Tuberculosis."

8:30-5:00—Registration, Main Floor Lobby.

Second General Session—Theatre

Moderator: Thomas H. McGavack, M. D.

9:30—Karl Menninger, M. D., Dean of the Menninger School of Psychiatry, Topeka, Kansas. Subject: "Major Psychiatry and Minor Psychiatry."

10:15—Henry T. Ricketts, M. D., Professor of Medicine, University of Chicago School of Medicine, Chicago, Illinois. Subject: "Types of Diabetes and Standards of Control."

11:00—Recess for Visiting Exhibits.

11:30—Edward H. Rynearson, M. D., Chairman of the Sections on Metabolic Diseases at the Mayo Clinic and Professor of Medicine at the Mayo Foundation for Medical Education and Research, Medical Graduate School, University of Minnesota. Subject: "Use and Abuse of Hormones."

12:15—Recess for Lunch and Visiting Exhibits.

FRIDAY AFTERNOON

August 25

1:30—West Virginia Pediatric Society. Grover C. Hedrick, Jr., M. D., *presiding*. (Tyler Room).

Business Meeting.

Guest Speakers: Waldo E. Nelson, M. D., Philadelphia. Subject: "Antenatal Origin of Disease."

William G. Klingberg, M. D., Morgantown. Subject: "Insecticide Poisoning." (Talk to be followed by discussion of Services and Facilities of the Department of Pediatrics at the WVU School of Medicine).

Miss Katharine E. Cox, Charleston. Subject: "Facilities and Services of the State Hygienic Laboratory."

Cocktail Party (Courtesy of Baker Laboratories).

2:00—West Virginia Obstetrical and Gynecological Society. John T. Chambers, M. D., *presiding*. (Pierce Room).

Guest Speaker: Thaddeus L. Montgomery, M. D., Philadelphia. Subject: "The Content and Practice of Present-day Obstetrics and Gynecology."

2:00—Section on Surgery. Charles E. Staats, M. D., *presiding*. (Fillmore Room).

Guest Speaker: Philip Thorek, M. D., Chicago. Subject: "Cancer—The Surgeon's Dilemma."

2:00—West Virginia Academy of Ophthalmology and Otolaryngology. John A. B. Holt, M. D., *presiding*. (Jackson Room).

Business Meeting.

2:00—Section on Neurology, Neurosurgery and Psychiatry. Albert L. Wanner, M. D., *presiding*. (Lee Room).

Guest Speaker: Karl Menninger, M. D., Topeka, Kansas. Subject: "Psychiatric Case Study."

2:30—Section on Internal Medicine. E. L. Crumpacker, M. D., *presiding*. (West Virginia Room).

Guest Speakers: Henry T. Ricketts, M. D., Chicago. Subject: "The Riddle of Diabetic Retinopathy."

Edward H. Rynearson, M. D., Rochester, Minnesota. Subject: "Which Goiters Are Best Treated with Surgery and Which with Radioactive Iodine."

Business Meeting.

3:30—West Virginia Radiological Society. Andrew K. Butler, M. D., *presiding*. (Buchanan Room).

Business Meeting and presentation of x-ray films.

FRIDAY EVENING

10:00—Auxiliary Entertainment and Dance. (Casino).

SATURDAY MORNING

August 26

8:20—Motion Pictures. Ralph H. Nestmann, M. D., in charge. (Theatre). "Bronchitis and Bronchiectasis," and "Medicine and Disability."

8:30-3:30—Registration, Main Floor Lobby.

Third General Session—Theatre

Moderator: Halvard Wanger, M. D.

9:30—Ivan L. Bennett, Jr., M. D., Baxley Professor of Pathology and Director of the Department of Pathology, The Johns Hopkins University School of Medicine, Baltimore. Subject: "Resistant Infections."

10:15—Thaddeus L. Montgomery, M. D., Professor and Head of the Department of Obstetrics and Gynecology, Jefferson Medical College of Philadelphia. Subject: "Labor is for the Baby."

11:00—Recess for Visiting Exhibits.

11:30—Waldo E. Nelson, M. D., Professor and Head of the Department of Pediatrics, Temple University School of Medicine, Philadelphia. Subject: "Infections in the Neonatal Period."

12:15—Recess for Lunch and Visiting Exhibits.

SATURDAY AFTERNOON

August 26

1:30—West Virginia Association of Pathologists. Werner A. Laqueur, M. D., *presiding.* (Jackson Room).

Business Meeting.

2:00—West Virginia Society of Anesthesiologists. Logan W. Hovis, M. D., *presiding.* (Buchanan Room).

Guest Speaker: Philip Thorek, M. D., Chicago. Subject: "Pre- and Post-Operative Care."

3:30—Second and Final Session of the House of Delegates. John W. Hash, M. D., *presiding.* (Theatre).

Address: Leonard W. Larson, M. D., President, American Medical Association.

Introduction of West Virginia's "General Practitioner of the Year."

Introduction of President of Woman's Auxiliary and Honor Guests.

Introduction of Recipient of 1961 Medical Scholarships Award.

Business Meeting.

Election of Officers.

Installation of D. E. Greeneltch, M. D., of Wheeling, as President of the State Medical Association.

SATURDAY EVENING

6:30-7:30—Cocktail Party and Reception Honoring the Officers of the West Virginia State Medical Association. (Chesapeake Hall Terrace).

7:30—Presidential Dinner honoring Leonard W. Larson, M. D., President of the American Medical Association. (Crystal Dining Room).

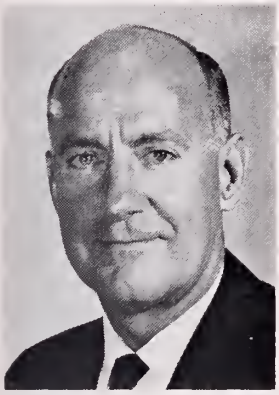
Speaker: Edward R. Annis, M. D., Miami, Florida.

8:00—Dancing Party for high school and college guests. Hosts: John and Dick Hash. (Kate's Mountain Lodge).

CONVENTION SPEAKERS

(Biographical Sketches)

Edward R. Annis, M. D., of Miami, Florida, Chief of the Department of Surgery at Mercy Hospital, and attending surgeon at North Shore Hospital, both in Miami, was born in Detroit, Michigan. He was graduated from the University of Detroit in 1933 and received his M. D. degree from Marquette University School of Medicine in 1938.



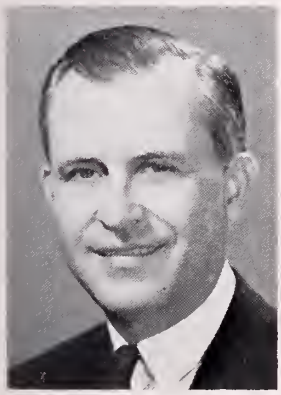
Edward R. Annis, M. D.

Doctor Annis has been active for many years in the affairs of local, state and national medical associations, and is currently serving as Chairman of the Legislative Committee of the Florida State Medical Association. He also serves on the Board of Directors of Family Service and the Senior Citizens Division of the Welfare Planning Council.

The National Conference of Christians and Jews awarded him the Brotherhood Medal in 1958.

Doctor Annis, who serves as Editor-at-Large of *Medical Economics* magazine, will be the speaker at the Presidential Dinner on Saturday Evening, August 26, honoring Dr. Leonard W. Larson, President of the American Medical Association.

Honorable W. W. Barron, Governor of the State of West Virginia, was born in Elkins and was graduated from Washington and Lee University. He received an LL. B degree from the West Virginia University College of Law. During World War II, he served for three years with the United States Army. He returned to Elkins following the war and served a term as Mayor of that city. He was elected to the House of Delegates from Randolph County in 1950 and was reelected to a second two-year term in 1952.



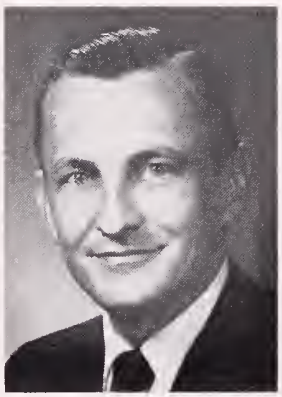
Gov. W. W. Barron

Governor Barron served as Chairman of the West Virginia Liquor Control Commission, 1953-55, and was elected to a four-year term as Attorney General in 1956.

He was elected the 26th Governor of West Virginia on November 8, 1960, and was inaugurated on January 16, 1961.

Governor Barron will deliver an address before the first general session on Thursday morning, August 24. It will mark Governor Barron's first appearance as a speaker on the program at an annual meeting of the State Medical Association.

Ivan L. Bennett, Jr., M. D., of Baltimore, Baxley Professor of Pathology and Director of the Department of Pathology, the Johns Hopkins University School of Medicine, was born in Washington, D. C. He received his M. D. degree from Emory University School of Medicine in 1946 and served an internship at Grady Hospital in Atlanta, 1946-47. He served residencies at the Naval Medical Research Institute, Johns Hopkins Hospital, Duke University Hospital and Grady Hospital, 1947-52.



Ivan L. Bennett, Jr., M. D.

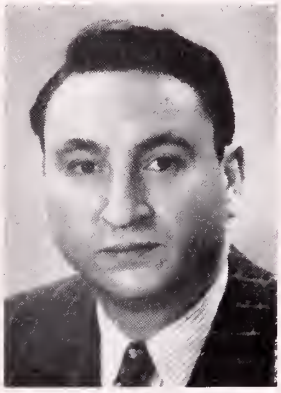
He served as Assistant Professor of Medicine at Yale University School of Medicine, 1952-54, and accepted appointment as Associate Professor of Medicine at Johns Hopkins University School of Medicine in 1954. He was appointed Professor of Medicine at Johns Hopkins in 1957 and in 1958 was named Baxley Professor of Pathology. He also serves as Pathologist-in-Chief at Johns Hopkins Hospital.

Doctor Bennett is a Diplomate of the American Board of Internal Medicine and a Fellow of the New York Academy of Sciences and the American College of Physicians. He is a past president of the American Federation for Clinical Research and a member of the American Association for the Advancement of Science.

He is also a member of the Baltimore City Medical Society, Medical and Chirurgical Faculty of Maryland and the American Medical Association.

Since 1955, he has served as a consultant to the Loch Raven VA Hospital and the USPHS Clinical Center in Bethesda, Maryland. He also is a special consultant to the Surgeon General of the U. S. Army, and the Epidemiology Branch of the USPHS Communicable Disease Center in Atlanta, Georgia.

Philip Blank, M. D., of Pittsburgh, Pennsylvania, Clinical Instructor in Allergy, University of Pittsburgh School of Medicine, and Director of Allergy of the Brentwood Medical Group in that city, was graduated from the University of Pittsburgh in 1931. He received his M. D. degree from the Georgetown University School of Medicine in 1936.



Philip Blank, M. D.

He also serves as attending allergist at the VA Hospital in Pittsburgh and as senior assistant in allergy at the Montefiore Hospital.

Doctor Blank is a Fellow of the International Society of Allergology, American College of Allergy and American Academy of Allergy. He is a member of the Pennsylvania Allergy Society and is a past president of the Pittsburgh Allergy Society. He also is a member of the American Writers Association and the American Society of Internal Medicine.

He served with the Medical Corps of the U. S. Army during World War II, being released with the rank of Lieutenant Colonel.

Edward L. Compere, M. D., of Chicago, Professor and Chairman of the Department of Orthopedic Surgery, Northwestern University School of Medicine, is a native of Oklahoma. He received his M. D. degree from Rush Medical College in 1926 and served an internship at Henry Ford Hospital in Detroit, 1926-28.

Edward L. Compere, M. D.

Following additional postgraduate work, he joined the faculty at the University of Chicago School of Medicine. In 1940, he was named Associate Professor of Surgery at Rush Medical College and the following year he joined the faculty at Northwestern. He also serves as Chairman of the Department of Orthopedic Surgery at Chicago Wesley Memorial Hospital and he is consultant to several other metropolitan hospitals.

He is a member of the American Medical Association, and served as Chairman of the Section on Orthopedic Surgery, 1956-57. He is vice president of the International College of Surgeons and served as president of the United States Section, ICS, 1958-60.

Doctor Compere served as Editor of the *Yearbook of Orthopaedic and Traumatic Surgery*, 1957-59, and as Associate Editor of the *Journal of Bone and Joint Surgery*, 1954-57.

R. H. Flocks, M. D., of Iowa City, Iowa, Professor and Head of the Department of Urology, State University of Iowa College of Medicine, was born in New York City. He received his M. D. degree from Johns Hopkins University School of Medicine in 1930 and served as a resident house officer at Johns Hopkins Hospital, 1930-31. He served a residency at University Hospitals in Iowa City, 1931-34.

R. H. Flocks, M. D.

He served as an Instructor and Chief Resident in Urology at that Hospital, 1934-35.

He was named an Associate in Urology at the State University of Iowa College of Medicine in 1935; Assistant Professor, 1937-39; Associate Professor, 1939-47; and Professor, 1947-49. He was named Head of the Department of Urology and Chief Urologist at University Hospitals in 1949.

He is a Diplomate of the American Board of Urology and a member of the American College of Surgeons, American Urological Association, Iowa State Medical Society and the American Medical Association.

He served as Secretary of the Section on Urology of the AMA, 1953-55, and as Chairman in 1956. He is a past president of the North Central Section of the American Urological Association and is a member of the AMA Residency Review Committee. He is also a member of the Board of Governors of the American College of Surgeons.

William G. Klingberg, M. D., of Morgantown, Professor and Head of the Department of Pediatrics, West Virginia University School of Medicine, was born in Wichita, Kansas. He was graduated from Municipal University in Wichita and received his M. D. degree from Washington University School of Medicine in St. Louis in 1943. He served an internship and had residency training at St. Louis Children's Hospital.

William G. Klingberg, M. D.

Prior to accepting his present position at the WVU School of Medicine, Doctor Klingberg served as Associate Professor of Pediatrics at Washington University School of Medicine. He also served as consultant in pediatrics for the medical schools of

the Universities of Missouri and Illinois. During 1957-58, he served as visiting professor at the Ankara University School of Medicine in Turkey.

Doctor Klingberg is certified by the American Board of Pediatrics and he is a member of the American Academy of Pediatrics. He served as a Captain in the Medical Corps, AUS, 1945-47.

Leonard W. Larson, M. D., of Bismarck, North Dakota, President of the American Medical Association, was born in Clarkfield, Minnesota. He received his M. D. degree from the University of Minnesota Medical School in 1922 and, following postgraduate work in pathology at the University of Minnesota Hospital, he joined the Quain and Ramstad Clinic in Bismarck in 1924. He has been a clinic partner since 1939. He also serves as pathologist at two hospitals in Bismarck.

Leonard W. Larson, M. D.

He is a past president of the American Society of Clinical Pathologists and was awarded a certificate of highest merit by that organization. He has written numerous scientific articles on laboratory medicine with particular emphasis on tumor diagnosis and treatment.

Doctor Larson, who was installed as president of the AMA during the annual meeting in New York City in June, has been a member of the AMA Board of Trustees since 1950, and served as chairman, 1958-60. He was named president elect at the Annual Meeting in Miami Beach in June, 1960.

Karl Menninger, M. D., of Topeka, Kansas, Dean of the Menninger School of Psychiatry, was born in Topeka, Kansas. He received his M. D. degree from Harvard Medical School in 1917 and served an internship at Kansas City General Hospital, 1917-18.

Karl Menninger, M. D.

From 1918 to 1920, he served as an Assistant to Professor Ernest Southard at the Boston Psychopathic Hospital. He also taught under him at the Harvard Medical School. In 1920, he returned to Topeka to practice with his father, Dr. C. F. Menninger, and they were joined a few years later by his brother, Dr. William C. Menninger.

The father and two sons established a sanitorium for adults and a residential school for exceptional children. From this beginning has grown the present Menninger Foundation, a nonprofit organization for psychiatric diagnosis and treatment and for education and research in psychiatric and psychological fields.

Doctor Menninger has contributed numerous articles to scientific journals and he is the author of several books including the *Human Mind*, an introduction to the field of philosophy of psychiatry, now in its third edition.

His most recent book is *The Theory of Psychoanalytic Technique*, published in 1958.

He is a member of the American Medical Association, the American Psychiatric Association and the American College of Surgeons. He is a past president of the American Psychoanalytic Association, Central Neuropsychiatric Association and American Orthopsychiatric Association.

Doctor Menninger is or has been a consultant to the Veterans Administration, the USPHS, the U. S. Department of Justice (Prison Service), the U. S. Department of Health, Education and Welfare (Vocational Rehabilitation), and the State of Kansas Board of Social Welfare (Institutional Management).

In 1945 he worked with General Bradley, General Hawley and Doctor Blaine in the organization of the Veterans Administration training program for psychiatrists and the conversion of the Winter General Hospital in Topeka into the Winter VA Hospital, a pilot training institution in the VA chain. He served as manager of the hospital for several years.

Thaddeus L. Montgomery, M. D., of Philadelphia, Professor and Head of the Department of Obstetrics and Gynecology, Jefferson Medical College of Philadelphia, was born in Macon, Illinois. He received his M. D. degree from Jefferson Medical College in 1920 and served an internship at Jefferson Medical College Hospital, 1920-22.

T. L. Montgomery, M. D.

In 1923, he joined the faculty at Jefferson as Assistant Demonstrator in the Department of Obstetrics. He was affiliated with that institution for the next 17 years and was Clinical Professor of Obstetrics before resigning in 1940 to accept appointment as Professor and Head of the Department of Obstetrics at the Temple University School of Medicine.

Doctor Montgomery returned to Jefferson in 1946 as Professor of Obstetrics and Gynecology and, in 1955, was named Chairman of the Department. He also serves as Consulting Obstetrician and Gynecologist to Philadelphia General Hospital.

He is a member of the Philadelphia County Medical Society, the Pennsylvania Medical Association and the American Medical Association. He is certified by the American Board of Obstetrics and Gynecology and has served a term as president of the American Association of Obstetrics and Gynecology, and Abdominal Surgeons.

He is the author of numerous papers which have appeared in specialty journals, and is also co-author of the book, *Textbook of Practical Obstetrics*, published by the F. A. Davis Company of Philadelphia.

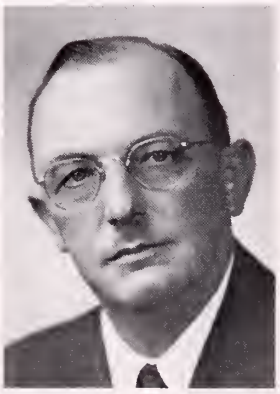
Waldo E. Nelson, M. D., of Philadelphia, Professor and Chairman of the Department of Pediatrics, Temple University School of Medicine, was born in McClure, Ohio. He received his M. D. degree from the University of Cincinnati School of Medicine in 1926 and served his internship at the Cincinnati General Hospital, 1926-27. He served residencies there and at the Children's Hospital, 1928-29.

Waldo E. Nelson, M. D.

He joined the faculty of the University of Cincinnati College of Medicine in 1929 and was Associate Professor of Pediatrics when he resigned in 1940 to accept appointment as Professor and Chairman of the Department of Pediatrics at Temple University School of Medicine. He also has served as Medical Director of the St. Christophers Hospital for Children in Philadelphia since 1947.

He is editor of the *Journal of Pediatrics*.

Homer E. Prince, M. D., of Crockett, Texas, Clinical Professor of Medicine (Emeritus), Baylor University College of Medicine, Houston, Texas. Doctor Prince received his M. D. degree from the University of Texas Medical Branch in Galveston in 1929.


Homer E. Prince, M. D.

He was named Associate Professor of Medicine at the Baylor University College of Medicine in 1943, and Clinical Professor of Medicine in 1954. He has served as Emeritus Clinical Professor since 1958.

Doctor Prince is a Fellow of the American College of Physicians, American Academy of Allergy and the American College of Allergists. He served a term as president of the College of Allergists, 1954-55. He also organized the Association of Allergists for Mycological Investigations in 1938 and has served as president of the organization since its inception.

Jose M. Quintero, M. D., of San Juan, Puerto Rico, Assistant Professor of Medicine, University of Puerto Rico School of Medicine, was born in Pinar del Rio, Cuba. He received his M. D. degree from the Havana University Medical School in 1934 and served an internship at Havana University Hospital, 1934-35.

Jose M. Quintero, M. D.

Doctor Quintero served as Head of the Allergy Department of the Public Health Administration in Cuba, 1945-60, and was Professor of Clinical Allergy at the Havana University Postgraduate Medical School, 1950-56. He was a member of the staff at Maternity Hospital in Havana, 1941-60.

He is a Fellow of the American College of Allergists and the American Academy of Allergy. He served as secretary-general of the International Association of Allergy, 1955-58, and is now serving as first vice president of that organization. He was the founder and has served a term as president of the Cuban Allergy Society.

Henry T. Ricketts, M. D., of Chicago, Professor of Medicine, University of Chicago School of Medicine, was born in Berlin, Germany, of American parents. He was graduated from the University of Chicago in 1924 and received his M. D. degree from Harvard Medical School in 1929. He interned at the Hospital of the University of Pennsylvania and served a residency at Billings Hospital in Chicago, 1931-33.

Henry T. Ricketts, M. D.

He was appointed Instructor in Medicine at the University of Chicago School of Medicine in 1933; Assistant Professor, 1939-43; Associate Professor 1943-49; and Professor in 1949.

Doctor Ricketts has written numerous articles on diabetes, insulin and aviation medicine, and is author of the book, *Diabetes Mellitus, Objectives and Methods of Treatment*. He is a past president of the American Diabetes Association.

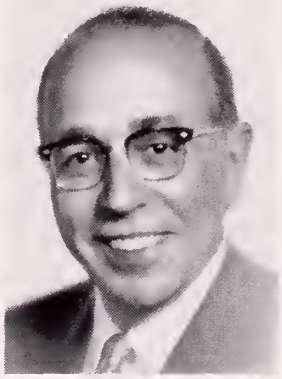
Edward H. Rynearson, M. D., of Rochester, Minnesota, Chairman of the Sections on Metabolic Diseases at the Mayo Clinic and Professor of Medicine at the Mayo Foundation for Medical Education and Research, Medical Graduate School, University of Minnesota, was born in Pittsburgh.

Edward H. Rynearson, M. D.

He was graduated from Ohio Wesleyan University in 1922, and received his M. D. degree from the University of Pittsburgh School of Medicine in 1926. He also received an M. S. degree in Medicine from the University of Minnesota in 1931. In 1952, he was awarded an honorary Doctor of Science degree by his alma mater.

He is a past president of the Indocrine Society and the author of numerous papers which have appeared in scientific journals. He is also the co-author of the book, *Obesity*.

Philip Thorek, M. D., of Chicago, Clinical Associate Professor of Surgery, University of Illinois College of Medicine, received his M. D. degree from the University of Illinois College of Medicine in 1931. He served an internship at Cook County Hospital in Chicago and took postgraduate work in Vienna, 1932-33.



Philip Thorek, M. D.

He is also Professor of Surgery at the Cook County Graduate School of Medicine, and Surgeon-in-Chief at American Hospital in Chicago. He is active in surgical cinematography research.

Doctor Thorek is a Diplomate of the American Board of Surgery and a Fellow of the American College of Surgeons, International College of Surgeons and the American College of Chest Physicians.

He is Editor-in-Chief of the *Journal of the International College of Surgeons.*

94TH ANNUAL MEETING

of the

West Virginia State Medical Association

The Greenbrier

AUGUST 24-26, 1961

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Reservation Manager
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DELEGATES AND ALTERNATES

B-R-T (3)—Delegates, A. Kyle Bush, Philippi; and Charles L. Leonard and Raymond W. Sass, Elkins. Alternates, Ernest G. Guy, Philippi; Semon M. Lilienfeld, Parsons; and A. C. Thompson, Elkins.

BOONE (2)—Delegates, W. V. Wilkerson, Whitesville; and H. H. Howell, Madison. Alternates, A. E. Glover and W. F. Harless, Madison.

BROOKE (2)—Delegates, Ralph McGraw, Follansbee; and James P. McMullen, Wellsburg. Alternates, William T. Booher, Wellsburg; and James E. Wise, Follansbee.

CABELL (8)—Delegates, Walter C. Swann, Gerald J. Eder, William E. Bray, Jr., C. Stafford Clay, Richard J. Stevens, Albert C. Esposito, Thomas G. Folsom and I. Ewen Taylor, Huntington. Alternates, Roy A. Edwards, Jr., J. Marshall Carter, Walter E. Vest, George M. Lyon, H. E. Beard, John M. Bobbitt, Jack Leckie and James P. Carey, Huntington.

CENTRAL WEST VIRGINIA (3)—Delegates, C. R. Davisson, Weston; J. E. Echols, Richwood; and R. L. Chamberlain, Buckhannon. Alternates, Donald S. Groves, Summersville; Charles T. Lively, Weston; and Emma Jane Freeman, Charleston.

EASTERN PANHANDLE (3)—Delegates, F. A. Hamilton, Jr., Martinsburg; L. Mildred Williams, Charles Town; and Halvard Wanger, Shepherdstown. Alternates, C. V. Townsend and E. Andrew Zepp, Martinsburg; and Philip M. Deatherage, Berkeley Springs.

FAYETTE (3)—Delegates, Ivan H. Bush, Jr., and Joe N. Jarrett, Oak Hill; and W. P. Bittinger, Summerlee. Alternate, T. Kerr Laird, Montgomery.

GREENBRIER VALLEY (3)—Delegates, E. L. Crumpacker, White Sulphur Springs; and Ilona D. Scott, White Oak. Alternate, Robert G. Shirey, Lewisburg.

HANCOCK (3)—Delegates, Myer Bogarad, Richard E. Flood and Edward A. Gretchen, Weirton.

HARRISON (4)—Delegates, A. Robert Marks, Marcus E. Farrell, R. T. Humphries and Andrew J. Weaver, Clarksburg. Alternates, L. Dale Simmons, J. Keith Pickens, James G. Ralston and L. E. Neal, Clarksburg.

KANAWHA (13)—Delegates, James S. Kessel, Ripley; W. W. Currence, South Charleston; Richard N. O'Dell, William B. Rossman, Robert C. Bock, Ralph H. Nestmann, Alfred J. Magee, Henry M. Hills, Jr., Pat A. Tuckwiller, Kenneth G. MacDonald, Carl B. Hall and R. Thomas Linger, Charleston; and Edward Jackson, St. Albans. Alternates, Eugene J. Ryan, Belle; Thomas H. Blake, St. Albans; Theodore P. Mantz, R. R. Summers, Milton J. Lilly, George R. Callender, Jr., James W. Lane, Howard A. Swart, John T. Chambers, Charleston; William D. Crigger, South Charleston; Carrel M. Caudill and Donald R. Gilbert, Charleston; and Donald E. Cunningham, St. Albans.

LOGAN (3)—Delegates, Charles K. Rath, Logan; and Henry K. Bobroff and Harold Van Hoose, Man. Alternates, Thomas P. Long, Lorado; and Everett H. Starcher, Logan.

MARION (4)—Delegates, S. L. Stillings, Mannington; and G. Thomas Evans, Seigle W. Parks and F. W. Mallamo, Fairmont. Alternates, Robert R. Frye, Mannington; and Joseph T. Mallamo, William T. Lawson and Jesse Ray Tuckwiller, Fairmont.

MARSHALL (2)—Delegates, William Paul Bradford, Moundsville; and Andrew J. Barger, Glen Dale. Alternates, K. J. Allen and J. W. Myers, Moundsville.

MASON (2)—Delegates, C. Leonard Brown and J. Stewart Lloyd, Pt. Pleasant. Alternate, Kathryn A. Rainbow, Lakin.

McDOWELL (3)—Delegates, A. J. Villani and George L. Fischer, Welch; and John H. Burke, Pageton. Alternates, John S. Cook and Odis Glover, Welch; and David J. Skewes, Coalwood.

MERCER (4)—Delegates, Upshur Higginbotham, Charles M. Scott, Wade H. St. Clair, Jr., and John J. Mahood, Bluefield. Alternates, Gordon L. Todd, Jr., and John I. Markell, Princeton; and Albert J. Paine, Bluefield.

MINGO (2)—Delegates, W. W. Scott and Andrew H. Henderson, Williamson. Alternates, Robert J. Tchou and Clarence G. Rayburn, Williamson.

MONONGALIA (4)—Delegates, Carl E. Johnson, Eldon B. Tucker, George A. Curry and C. C. Romine, Morgantown. Alternates, Maynard P. Pride, E. F. Heiskell, Jr., Robert J. Fleming and Justus C. Pickett, Morgantown.

OHIO (6)—Delegates, M. B. Williams, Thomas L. Thomas, Richard D. Gill, Earl S. Phillips, W. Carroll Boggs and James E. Spargo, Wheeling. Alternates, Bradford McCuskey, S. S. Bobes, Howard G. Weiler, R. U. Drinkard, R. W. W. Phillips and Nime K. Joseph, Wheeling.

PARKERSBURG ACADEMY (5)—Delegates, Robert C. Lincicome, William E. Gilmore, S. William Goff and Charles F. Whitaker, Jr., Parkersburg. Alternates, Randall Connolly, Vienna; Martha Jane Coyner, Harrisville; and Robert D. Crooks, Charles W. Thacker and Charles H. Barnett, Parkersburg.

POTOMAC VALLEY (3)—Delegates, Vernon L. Dyer, Petersburg; J. H. Wolverton, Jr., Piedmont; and Charles J. Sites, Franklin.

PRESTON (2)—Delegates, W. Parke Johnson, Jr., Masontown; and Del Roy R. Davis, Kingwood. Alternates, Jerome C. Arnett, Rowlesburg; and William H. Harriman, Jr., Terra Alta.

RALEIGH (5)—Delegates, Grover C. Hedrick, Jr., Clark Kessel, Warren D. Elliott, John J. Marra and Thomas L. Martin, Beckley. Alternates, F. Vivan Lilly, Forest A. Cornwell, J. A. Vermeeren, Richard G. Starr and Ross P. Daniel, Beckley.

SUMMERS (2)—Delegates, Buford W. McNeer and A. W. Holmes, Hinton. Alternates, Jack D. Woodrum and Jesse T. Johnson, Hinton.

TAYLOR (2)—Delegates, R. D. Stout and Paul P. Warden, Grafton. Alternates, Herbert N. Shanes and Charles A. Haislip, Grafton.

WETZEL (2)—Delegates, Charles P. Watson and Lemoyne Coffield, New Martinsville. Alternates, Kent M. Hornbrook and T. B. Gordon, New Martinsville.

WYOMING (2)—Delegates, Mario Cardenas and Ward Wylie, Mullens. Alternates, E. M. Wilkinson, Pineville; and George F. Fordham, Mullens.

Reception Committee

James S. Klumpp, *Chairman*

Frank J. Holroyd
Ward Wylie
Thomas L. Harris
Charles A. Hoffman
Thomas G. Reed

D. E. Greeneltch
R. U. Drinkard
George R. Callender, Jr.
R. L. Anderson
J. C. Pickett
Athey R. Lutz

B. B. Richmond
Thomas B. Baer
Paul L. McCuskey
D. Franklin Milam
Ralph J. Holloway

William E. Gilmore
E. Lyle Gage
Robert J. Reed
Kenneth G. MacDonald
Gordon L. Todd, Jr.

Charles M. Scott
William B. Rossman
James Speed Rogers, Jr.
A. L. Wanner
Thomas L. Holbrook

William M. Sheppe
Marion F. Jarrett
John H. Gile
William C. Revercomb, Jr.
George P. Heffner

Thomas H. McGavack
Seigle W. Parks
A. B. Curry Ellison
E. L. Crumpacker
Richard V. Lynch, Jr.
Hu C. Myers

Grover B. Swoyer
Werner A. Laqueur
Charles L. Leonard
John T. Chambers
A. J. Villani

Frederick H. Dobbs
Charles L. Goodhand
E. J. Humphrey
Thomas G. Folsom
Grover C. Hedrick, Jr.

W. W. Currence
Robert T. Bandi
Thomas G. Potterfield
Henrietta Marquis
John E. Lutz

Official Program
WOMAN'S AUXILIARY
to the
West Virginia State Medical Association
37th Annual Meeting
The Greenbrier
White Sulphur Springs
August 24-26, 1961

WEDNESDAY AFTERNOON
August 23

4:00 P. M.—Pre-Convention Board Meeting (Pierce Room). Mrs. Clark K. Sleeth, President, *presiding*.

9:00 P. M.—First Session of the House of Delegates, State Medical Association. (Fillmore and Van Buren Rooms).

Annual Address of the President, John W. Hash, M. D., Charleston. Auxiliary members are invited and urged to attend.

10:00-12:00—Dancing in the Ballroom.

THURSDAY MORNING
August 24

9:00—Formal opening of the 94th Annual Meeting of the West Virginia State Medical Association.

Address by the Honorable William Wallace Barron, Governor of West Virginia.

All Auxiliary members are invited to attend (Theatre).

9:45—Formal opening of Convention. Mrs. Clark K. Sleeth, President, *presiding* (Fillmore and Van Buren Rooms).

Invocation and Pledge of Loyalty, Mrs. J. C. Huffman.

Introduction of Honor Guests.

Introduction of Convention Chairman, Mrs. Robert J. Nottingham.

Roll Call of Delegates, Mrs. Rupert W. Powell.

Convention Rules of Order, Mrs. C. R. Davisson, Parliamentarian.

Treasurer's Report, Mrs. Andrew J. Weaver.

In Memoriam, Mrs. Paul P. Warden.

Credentials and Registration, Mrs. Clement A. Smith.

Keynote Address—Mrs. William G. Thuss, President-Elect, Woman's Auxiliary to the American Medical Association.

Recommendations from Pre-Convention Board Meeting, Mrs. Clark K. Sleeth.

New Business and Announcements.

Report of Revisions Committee, Mrs. William A. Thornhill, Jr.

Report of Nominating Committee, First Reading, Mrs. R. R. Pittman.

Election of 1962 Nominating Committee.

Reports of Officers:

President—Mrs. Clark K. Sleeth.
President-Elect—Mrs. Vernon L. Dyer.
First Vice-President—Mrs. C. Stafford Clay.
Second Vice-President—Mrs. George A. Curry.
Third Vice-President—Mrs. P. A. Tuckwiller.
Fourth Vice-President—Mrs. Earl S. Phillips.
Treasurer—Mrs. Andrew J. Weaver.
Recording Secretary—Mrs. Rupert W. Powell.
Corresponding Secretary—Mrs. Clement A. Smith.
Parliamentarian—Mrs. Claude R. Davisson.

Reports of Standing Committees:

AMEF—Mrs. Grover C. Hedrick, Jr.
Archives & History—Mrs. William T. Lawson.
By-Laws and Handbook—Mrs. William A. Thornhill, Jr.
Civil Defense—Mrs. George F. Pugh.
Community Service—Mrs. Justus C. Pickett.
Convention—Mrs. Robert J. Nottingham and Mrs. Robert J. Fleming.
Editor, State News Bulletin—Mrs. Edward J. Van Liere.
Circulation Manager—Mrs. Hubert A. Shaffer.
Finance—Mrs. Harry E. Beard.
Health Careers—Mrs. A. J. Villani.
Legislation—Mrs. L. Dale Simmons.
Members-at-Large—Mrs. Hu C. Myers.
Membership—Mrs. Vernon L. Dyer.
Mental Health—Mrs. George F. Evans.
National Bulletin—Mrs. Joseph A. Smith.
Necrology—Mrs. Paul P. Warden.
Nutrition—Mrs. William A. Ehrgott.
Press and Publicity—Mrs. John C. Condry.
Program—Mrs. A. C. Chandler.
Rural Health—Mrs. Lynwood D. Zinn.
Safety—Mrs. Buford W. McNeer.
Southern Medical Councilor—Mrs. J. C. Huffman.

Presentation of County Presidents:

Boone—Mrs. O. D. MacCallum.
Cabell—Mrs. C. H. Boso.
Central West Virginia—Mrs. Elden H. Pertz.
Eastern Panhandle—Mrs. C. Vincent Townsend.
Fayette—Mrs. T. C. Sims.
Greenbrier Valley—Mrs. Lee B. Todd.
Hancock—Mrs. Roy G. Conrad.
Harrison—Mrs. Herman Fischer.
Kanawha—Mrs. J. A. B. Holt.
Logan—Mrs. Ray M. Kessel.
Marion—Mrs. John D. Lindsay, Jr.
McDowell—Mrs. H. A. Bracey.
Mercer—Mrs. R. R. Raub.
Mingo—Mrs. W. H. Price.
Monongalia—Mrs. Clement A. Smith.
Ohio—Mrs. Robert T. Bandi.
Potomac Valley—Mrs. Harry F. Coffman.
Preston—Mrs. John Trenton.
Raleigh—Mrs. Sherl J. Winter.
Summers—Mrs. J. D. Woodrum.
Taylor—Mrs. Herbert N. Shanes.
Wood—Mrs. Charles H. Barnett.
Wyoming—Mrs. Mario Cardenas.

THURSDAY AFTERNOON

2:30-5:00—Bridge Party in the Trellis Lobby.

3:00—Naturalist Tour.

Tour of Alabama Arts Colony.

Visit the Exhibits. Chesapeake Hall open until 5 o'clock.

THURSDAY EVENING

10:00-12:00—Dancing in the Ballroom.

West Virginia Day at the West Virginia State Fairgrounds at Fairlea.

FRIDAY MORNING

8:00—Past President's Breakfast, Mrs. Robert R. Pittman, Immediate Past President, *presiding*. (Director's Room).

9:30—Second general session. Mrs. Clark K. Sleeth, President, *presiding*. (Fillmore and Van Buren Rooms).

Invocation and Pledge of Loyalty, Mrs. Charles L. Goodhand.

Introduction of Honor Guests.

Roll Call—Mrs. Rupert W. Powell.

Address—"Nutrition and Diet," Philip Thorek, M. D.

Report of Reading Committee, Mrs. Howard G. Weiler.

Convention Announcements—Mrs. Robert J. Nottingham.

Report of Woman's Auxiliary to the Student American Medical Association.

Guest Speaker: Mrs. Kalford Howard, President, Woman's Auxiliary to the Southern Medical Association.

Reports of Convention Committees:

Finance—Mrs. Harry E. Beard.

Courtesy Resolutions—Mrs. Ross P. Daniel.

Credentials and Registration—Mrs. Clement A. Smith.

Press and Publicity—Mrs. John C. Condry.

Report of Nominating Committee, Mrs. Robert R. Pittman, Chairman.

Election of Officers.

Installation of Officers, Mrs. William G. Thuss, President-Elect of the Woman's Auxiliary to the American Medical Association.

Presentation of President's Pin and Gavel, Mrs. Clark K. Sleeth.

Presentation of Past President's Pin, Mrs. Robert R. Pittman.

Inaugural Address—Mrs. Vernon L. Dyer.

FRIDAY AFTERNOON

12:30—Luncheon and Fashion Show by The Floradora Shoppe, Morgantown. Mrs. D. Franklin Milam, Chairman of the fashion show. (Crystal Dining Room).

Golf and Tennis Tournaments.

Visit the Exhibits. Chesapeake Hall open until 5 o'clock.

FRIDAY EVENING

10:00—Cabaret Style Dance at the Casino with the Auxiliary as hostesses.

Introduction of Honor Guests.

Awarding of Golf and Tennis prizes.

SATURDAY MORNING

10:00—Post-Convention Conference and Board Meeting. Mrs. Vernon L. Dyer, President, *presiding* (Fillmore and Van Buren Rooms).

SATURDAY AFTERNOON

3:30—Second and Final Session of the House of Delegates (Theatre).

All Auxiliary members are invited and urged to attend both sessions of the House of Delegates.

SATURDAY EVENING

6:30-7:30—Cocktail Party and Reception honoring the Officers of the West Virginia State Medical Association. (Chesapeake Hall Terrace).

7:30—Presidential Dinner honoring Leonard W. Larson, M. D., President of the American Medical Association. (Crystal Dining Room).

Speaker: Edward R. Annis, M. D., Miami, Florida.

8:00—Dancing Party for high school and college guests. Hosts: John and Dick Hash. (Kate's Mountain Lodge).

SCIENTIFIC EXHIBITS

(Chesapeake Hall)

AMERICAN CANCER SOCIETY W. VA. DIVISION, INC.

Chesapeake Hall

"Lung Cancer Prevention and the Physician." Through charts and other illustrative material, the exhibit depicts the high lung cancer death rate today and the projected possible loss from the disease of more than one million present school children before they reach the age of 70. This prospect is of particular concern to the physician. The exhibit considers the role of the physician in the prevention of lung cancer and the efforts of the Society to this end. It is hoped the exhibit will stimulate the interest and support of physicians in our teenage smoking program.

Ralph G. Beveridge, Executive Director.

AMERICAN MEDICAL EDUCATION FOUNDATION

Chesapeake Hall

COBALT THERAPY FOR TREATMENT OF CANCER AND ALLIED DISEASES

Chesapeake Hall

Supervoltage therapy which includes Cobalt 60 has certain established advantages over conventional therapy for selected neoplasms. These advantages, along with illustrations of pre- and post-therapy radiographs, and methods of management are demonstrated. In several instances combined therapy, utilizing either chemotherapy and radioactive drugs and/or surgery with radiation is demonstrated.

Everett W. Squire, M. D., Paul Francke, Jr., M. D., and Mark H. Wholey, M. D.

INTRACARDIAC DEFECTS

Chesapeake Hall

Herbert E. Warden, M. D.

THE NATIONAL FOUNDATION

Chesapeake Hall

"Chemistry, Chromosomes and Congenital Anomalies." This exhibit will present by means of models, diagrams and pictures suggested relationship between deoxyribonucleic acid and chromosomes as inferred from bacterial genetics and the relationship between chromosome patterns and congenital malformations.

T. Sterling Evans and John C. Stepp, Field Representatives.

OFFICE OF DEFENSE MOBILIZATION W. VA. STATE DEPARTMENT OF HEALTH

Chesapeake Hall

The State Health Department, in cooperation with the State Medical Association's Committee on Medical Emergencies and Civil Defense, has made progress in general training and information during the past year. The goal for this year is trained, responsible, and capable teams of medical, technical and aid personnel for Civil Defense Emergency Hospitals and Medical Self-Help and Buddy Care Training for the total population.

Samuel J. Hawkins, Program Consultant.

DESIGN FOR A DISABILITY DECISION

Chesapeake Hall

This exhibit through brief messages and pictures, illuminated in sequence, explains how members of the medical profession cooperate in making effective the provisions of the social security disability program. This cooperation includes: (a) medical participation in the development of medically sound disability evaluation principles through membership in the Medical Advisory Committee; (b) the providing of complete medical reports for patients by attending physicians; and (c) medical participation in determinations of disability by physician members of State agency evaluation teams. The exhibit was prepared by the U. S. Department of Health, Education and Welfare, Social Security Administration, Bureau of Old-Age and Survivors Insurance.

DIVISION OF VOCATIONAL REHABILITATION

Chesapeake Hall

"Vocational Rehabilitation—the Bridge from Idleness to Opportunity," depicts through color slides the various services we offer handicapped West Virginians to prepare them for and place them in gainful employment.

F. Ray Power, Director.

PRELIMINARY STUDIES IN TELEVISING X-RAY FILMS

Chesapeake Hall

Extensive interest in television as applied to many medical, surgical, hospital and educational problems is now being manifest. This is especially true in the use of television with flouroscopy. Presented in this exhibit are some preliminary studies of the method as applied to x-ray films. Control of brightness and

contrast with some sacrifice of detail appears to be the present situation as to the use of TV as applied to x-ray films. Improvement in detail can be anticipated as the result of studies in equipment even now under way. And, in some instances at least, the ability to control brightness and contrast offers possibilities for diagnostic improvement that should be further investigated. Also, the ability to easily and quickly produce any degree of magnification desired is a distinct advantage. The possibility of each doctor or student studying the films from his individual TV screen—the consultant, even in a distant city, having the flouroscopy and films before him for study as he discusses the case with the physician in charge—and many other uses will be immediately apparent. With the application of TV to medical, surgical or hospital problems as a whole, a new vista has opened up and its application to education seems unlimited.

J. Richard Crawford, B. Sc., and Karl J. Myers, M. D.

REJUVENATION OF THE AGED FACE

Chesapeake Hall

This exhibit illustrates the corrective treatment of patients who demonstrate the appearance of the aged face. The exhibit will show the pre- and post-operative comparison with a description of the technique involved.

Clyde Litton, M. D., D. D. S.

WEST VIRGINIA ASSOCIATION FOR MENTAL HEALTH

Chesapeake Hall

"With Your Help the Mentally Ill Can Come Back." This exhibit consists of three units which demonstrate research, treatment, community facilities and rehabilitation of the mentally ill.

Alice Scott Leslie, Executive Director.

WEST VIRGINIA UNIVERSITY MEDICAL CENTER

Chesapeake Hall

"Progress in Growth, 1960-61." This display will illustrate graphically the growth of the clinical services of the University Hospital from the opening date in August 1960 to June 30, 1961. It will also list current members of the clinical staff and indicate their respective fields of special interest where appropriate.

WEST VIRGINIA TUBERCULOSIS AND HEALTH ASSOCIATION

Chesapeake Hall

Experience has shown that patients treated with steroids, without first determining presence or absence of TB infection, have often developed active TB. This exhibit highlights this fact and indicates constructive steps physicians can follow in using steroids where indicated without risk of activating TB. "Steroids Activate TB," the scientific exhibit prepared by the Medical Education Division of the American Trudeau Society for the AMA Meeting, is designed to make one point, namely, that the hazard of tuberculosis complicating steroid treatment of other chronic conditions can easily be prevented. It will show the difference in the tissues of experimental animals between the natural defense against tuberculosis and the germs running wild when these defenses have been suppressed by cortisons. It will also show actual cases in which the administration of corticosteroids activated a latent or inactive tuberculosis with disastrous results. Finally, it will give the simple procedures necessary to protect the patient by the concomitant administration of isoniazid and show when this is indicated.

Thomas A. Deveny, Jr. Executive Director.

INDUSTRIAL EXHIBITS

(Chesapeake Hall)

ABBOTT LABORATORIES
North Chicago, Illinois

Booth 10

Abbott Laboratories invites you to visit our exhibit. Our representatives will be happy to answer any questions you may have concerning our leading products and new developments.

THE BAKER LABORATORIES, INC.
Cleveland, Ohio

Booth 16

You are invited to visit our booth where Baker's Modified Milk and Varamel, two successful products for infant feeding are on display. Baker representatives will be glad to discuss the benefits of Baker Milk products which provide all the normal dietary requirements plus a reserve for stress situations.

Representative: Robert J. Porter.

CHARLES BRUNING COMPANY, INC.
Pittsburgh, Pennsylvania

Booth 31

The Charles Bruning Company is one of the largest manufacturers of copying machines and copying materials for use in business and industry since 1897. The unique Copyflex statement copies cost less than 1¢. Exact facsimiles of a translucent original are delivered as sharp, clean, black-on-white (or colored, if you prefer) copies. Your patient receives the same complete information as recorded on your ledger. Professional looking Copyflex copies can be made easily and economically by anyone, in seconds. It will be our pleasure to welcome you at Booth 31.

Representative: A. M. Casale.

BURROUGHS WELLCOME & CO. (U.S.A.) INC.
Tuckahoe, New York

Booth 32

You are cordially invited to visit Burroughs Wellcome & Co., (U.S.A.) Inc., booth 32 for the latest information on our products, and the newest developments from the extensive research facilities of Burroughs Wellcome & Co. Of particular interest at this meeting will be our new topical and ophthalmic antibiotic products, as well as our 'Actifed-C' Expectorant. Our informed staff welcomes this opportunity to show you these new products.

Representatives: F. B. Vance and D. F. Molinari.

CAMERON SURGICAL INSTRUMENTS COMPANY
Chicago 12, Illinois

Booth 13

Cameron Surgical Instruments Company will display its new Major Electrosurgical Unit for hospital use, as well as those for modern office surgery. Also showing Suction Coagulation Electrodes, Snares, Biopsy Forceps, electrically illuminated Ano-Procto-Sigmoidoscopic equipment (distal and proximal), Vaginal Speculae, Otoscope, Mouth Gag, Transilluminators, Gastroscopes, Headlites, Binocular Loupes, Luxo Lamps, etc. We would like the opportunity of demonstrating to you.

Representative: William E. Mettler.

CARNATION COMPANY
Los Angeles, California

Booth 7

Carnation Company cordially invites you to visit Booth No. 7, where Medical Representatives will be pleased to welcome members and guests of the West Virginia State Medical Association. Recent literature and information regarding Carnation Evaporated, Carnation Instant Non-Fat and Carnalac are available. Any questions pertaining to our physician-researched material for use in your practice or hospital will be cheerfully discussed.

CIBA PHARMACEUTICAL PRODUCTS, INC.
Summit, New Jersey

Booth 55

Forhistal® is a new, low-dosage antiallergic and antipruritic agent. Clinically, Forhistal has proved highly effective in a wide range of allergic and pruritic disorders. It is well tolerated by patients of all ages. Forhistal is available in 4 forms of issue: Lontabs®, Tablets, Syrup and Pediatric Drops.

THE COCA-COLA COMPANY
Atlanta, Georgia

Booth 58

Ice-cold Coca-Cola served through the courtesy and cooperation of the Coca-Cola Bottling Company of Clifton Forge, Inc., and The Coca-Cola Company.

DESITIN CHEMICAL COMPANY
Providence, Rhode Island

Booth 12

Desitin Ointment: for treatment of burns, ulcers, diaper rash, abrasions, etc.; Desitin Powder: Relieves chafing, sunburn, diaper rash, etc.; Desitin Suppositories and Rectal Ointment: relieve pain and itching in uncomplicated hemorrhoids, fissures; Desitin Baby Lotion: protective antiseptic; Desitin Acne Cream: A non-staining, flesh-tinted "Medicream" for the treatment of Acne-Vulgaris; Desitin Cosmetic and Nursery Soap Supermild; Desitin Suppositories with Hydrocortisone: prompt response to inflammatory conditions in proctitis, severe pruritus, edema.

Representative: Jack Dinin.

ENCYCLOPEDIA AMERICANA
Grand Rapids, Michigan

Booth 11

Encyclopedia Americana most cordially invites you to inspect the newly revised 1961 edition featuring *Min-May*, the self-tutoring machine described by *Time Magazine* as follows: "The first real innovation in teaching since the invention of movable type during the fifteenth century." We also have a souvenir for you without obligation.

Representatives: Lorraine and Armin Eastman.

GEIGY PHARMACEUTICALS
Yonkers, New York

Booth 52

Geigy cordially invites Members and Guests of the Association to its display booth. The newest technics relating to bowel hygiene in addition to more recent developments in therapy of cardiovascular metabolic and psychiatric disorders may be discussed with physicians and representatives in attendance.

Representatives: Frederick B. Cornell, Jr., John Bushkar and Victor Firth.

GREAT BOOKS OF THE WESTERN WORLD
Grand Rapids, Michigan

Booth 46

The Great Ideas Program, a new advancement in liberal education, spanning 3,000 years of Western Thought, from Homer and the Bible to the 20th century, featuring the master key to the Great Books—The Syntopicon. The revolutionary Syntopicon, a totally new basic reference work, accomplishing in the field of ideas what the dictionary does for words, and the encyclopedia in the field of facts.

HOSPITAL & PHYSICIANS SUPPLY COMPANY
Charleston, West Virginia

Booth 49

You are cordially invited to visit our booth located in space number 49. Our exhibit will consist of the latest in Burdick new Dual-Speed Electrocardiograph, new diagnostic instruments by Welch Allyn, Castle autoclaves, all types of emergency resuscitation equipment plus our complete line of Stille instruments. We sincerely thank you for your patronage this past year, and shall look forward to visiting with you again.

Representatives: L. Keith Kloman, Robert E. Lee Frazier, Carl A. Carte, Robert K. Thacker and Gordon H. Davis.

ELI LILLY AND COMPANY
Indianapolis, Indiana

Booth 17

You are cordially invited to visit the Lilly exhibit located in space number 17. The Lilly sales people in attendance welcome your questions about Lilly products and recent therapeutic developments.

Representatives: J. M. Capin and Paul Moore.

THE S. E. MASSENGILL COMPANY
Bristol, Tennessee

Booth 18

Best wishes from Massengill to the West Virginia State Medical Association for a most successful convention! Our representative will welcome the opportunity to discuss products of interest to you. On display will be several Massengill specialty preparations, and literature and samples will be available, should you desire them.

Representative: L. M. Cobb, Jr.

McLAIN SURGICAL SUPPLY, INC.
Charleston—Charlottesville

Booth 8

Please stop by our booth and see the Ritter Universal and Procto Tables, Liebel-Flarsheim Self-Calculating BMR, Two-Speed EKG, Ultrasound, Autoclaves, Exam Lights and Scales, along with many other new and interesting items.

Representatives: Jack Schwarz and Dick Hightower.

MEBUCO, INC.
Mansfield, Ohio

Booth 14

We cordially invite you to visit us at our booth where our representatives will be happy to answer any questions you may have concerning the Mebuco plan. Basically, we design, build and completely equip medical offices at a price that is realistic. It is a package approach that allows the physician to obtain a professionally designed building without his spending hours upon hours of his own valuable time. Actually from the time we start until completion, the doctor need not be bothered at all.

Representatives: Dan Berlin, Ralph Sebring and Richard Selby.

MEDICAL ARTS SUPPLY COMPANY
Huntington, West Virginia

Booth 41

We extend a cordial invitation to all of you to visit our exhibit where our representatives will be pleased to show and demonstrate the new items we are showing that we feel will be of interest to you. Be sure to see the "New Pelton Omniclave", the latest development in office autoclaves providing steam and dry sterilization all in one unit.

Representatives: M. L. Clovis and Roy Childers.

MERCK SHARP & DOHME
Philadelphia, Pennsylvania

Booth 51

"Lyovac" "Thrombolysin" fibrinolysin (human) for use to promote the dissolution of certain intravascular thrombi is featured. "Elavil," a potent antidepressant agent with a low degree of toxicity, and "Decadron," for symptomatic treatment in patients with allergic and inflammatory disorders, are also of interest. Technically trained personnel will be present to discuss these and other subjects of clinical interest.

Representatives: M. S. Robertson and J. Payne.

ORTHO PHARMACEUTICAL CORPORATION
Raritan, New Jersey

Booth 1

This year Ortho has added two new dosage forms to Sporostacin Chlordantoin Cream which was introduced in 1960 for monilial vaginitis. The two new forms are Sporostacin Lotion for Monilial dermatitis and Sporostacin Solution, indicated in fungus infections of the nails and in paronychia. All three forms of Sporostacin are non-staining, odorless, and have found enthusiastic patient acceptance.

Representatives: Raymond E. Weekley, Jr., Maynard L. Inman and Guy M. Hunicutt.

PARKE, DAVIS & COMPANY
Detroit, Michigan

Booth 53

Medical service members of our staff will be in attendance at our booth to discuss important Parke-Davis specialties which will be on display.

Representatives: G. W. Durling and B. Thompson.

PFIZER LABORATORIES
Brooklyn, New York

Booth 15

You are cordially invited to visit the Pfizer Laboratories' booth where our Professional Service Representatives will be pleased to discuss the latest topics of clinical interest.

WM. P. POYTHRESS & COMPANY, INC.
Richmond, Virginia

Booth 2

A cordial welcome awaits you at the Poythress booth, which will feature Bensulfoid Lotion, outstanding and distinctive new treatment for acne, Synirin, for pain, and Mudrane, effective, balanced formula for bronchial asthma. Solfoton, Solfoserpine, Panalgesic and Trocinate will also be featured. Your requests for literature and professional trial supplies of any Poythress products are invited.

Representative: Harper A. Gordon.

SANDOZ PHARMACEUTICALS
Hanover, New Jersey

Booth 9

Sandoz Pharmaceuticals cordially invites you to visit our display at Booth 9. Mellaril—the first selective phenothiazine exhibiting potent tranquilizing activity without antiemetic action. The greater toleration, notable relative absence of extra pyramidal symptoms, enhances its usefulness in management of major and minor emotional disorders. Torecan—as a sequel to the original research which led to the synthesis of Mellaril, a tranquilizer relatively devoid of antiemetic activity, the Sandoz Laboratories have now succeeded in developing a potent antiemetic with little or no tranquilizing properties. Accordingly, this compound, Torecan, constitutes a more specific antiemetic and the results obtained to date indicate that it is a promising agent for the treatment of nausea and emesis of diverse etiology. Any of our representatives in attendance will gladly answer questions about these and other Sandoz products.

Representative: Issac Phipps.

W. B. SAUNDERS COMPANY
Philadelphia, Pennsylvania

Booth 33

Hugh J. McGinn will be on hand as usual with the complete Saunders' line. New books of special interest include: Pillsbury, et al: Dermatology, Edwards: An Atlas of Acquired Diseases of the Heart and Great Vessels, Rubin: Thoracic Diseases, Sodeman: Pathologic Physiology, Perez-Tamayo: Mechanisms of Disease and Nagan: Medical Almanac.

Representative: Hugh J. McGinn.

SCHERING CORPORATION
Bloomfield, New Jersey

Booth 6

You are cordially invited to visit the Schering technical exhibit where information on the following products may be obtained: Celestone, a new magnitude in anti-inflammatory corticosteroid short-term therapy; Tindal, a new calming agent with mild sedative effects for the cardiovascular patient who must slow

down; Fulvicin, the first oral antifungal antibiotic for ringworm; and Chlor-Trimeton, unsurpassed antihistamine.

Representatives: Jack Rogers, Charles Carter and Robert Link.

E. R. SQUIBB & SONS
New York City

Booth 56

E. R. Squibb & Sons has long been a leader in development of new therapeutic agents for prevention and treatment of disease. The results of our diligent research are available to the Medical Profession in new products or improvements in products already marketed. At our booth we are pleased to present up-to-date information on these advances for your consideration.

STATE MEDICAL ASSOCIATION'S GROUP DISABILITY INSURANCE PROGRAM

Booth 34

The administrator of the Group Disability Insurance Program will provide a brochure describing the plan of the West Virginia State Medical Association's Group Health and Accident and Office Overhead Expense Insurance Programs to visitors at the booth. The fundamental advantage of the group insurance plan is service here in West Virginia. This is an opportunity to meet the administrator—he is the man who will pay your claim.

Representatives: J. Banks Shepherd and A. B. Daniel.

THE STUART COMPANY
Pasadena, California

Booth 54

A cordial invitation is extended to all members and guests attending this meeting to visit the Stuart Company booth. Specially trained representatives will be in attendance to answer your questions on new products developed in our new and modern laboratories which have received international acclaim.

Representatives: William S. Wooldridge and Barry R. Smith.

THERMO-FAX SALES, INC.
Charleston, West Virginia

Booth 50

The Thermo-Fax Copying Products, manufactured by Minnesota Mining and Manufacturing Company, are widely used by the medical profession in preparing itemized patient statements. The new Model 44 Secretary Copying Machine equipped with Copy-Trol Dial virtually eliminates any wastage of statement paper. This same versatile copying machine will also laminate important documents, prepare projection transparencies, and will do many other important jobs in the doctor's office. We cordially invite you to visit our booth and get the latest on these products from 3M research.

Representatives: Richard Curran and Hugh Meier.

WARNER-CHILCOTT LABORATORIES
Morris Plains, New Jersey

Booth 4

Gelusil—the physician's antacid—for the relief of gastric hyperacidity and management of peptic ulcer. Provides two protective coating gels for prompt, prolonged relief of pain. Gelusil is all antacid in action—is non-constipating, contains no laxative. Peritrate—A long-acting coronary vasodilator for patients with coronary artery disease—whether angina pectoris or occlusion. Peritrate improves coronary blood flow, thereby increasing collateral circulation, with no significant change in blood pressure or pulse rate. Smooth onset of action virtually eliminates nitrate headache.

Representatives: David H. Bishop, Charles C. Faxton and Carmen D. Polino.

WEST VIRGINIA LIFE INSURANCE COMPANY
Huntington, West Virginia

Booth 35

Several thousand West Virginians join in presenting the Professional Protection Policy of the West Virginia Life Insurance Company, a wholly owned subsidiary of the West Virginia Insurance Management Corporation. The unusual features of this Professional Protection Policy of the West Virginia Life Insurance Company are detailed in the brochure that tells of protection of West Virginians by West Virginians. Meet some of the principals of this West Virginia owned company that was planned and designed for your protection and development of our State.

ANNUAL REPORTS

Committee on Aging

The first meeting of the Committee on Aging was held on November 30, 1960, at the Daniel Boone Hotel in Charleston, and the activities of this Committee in the past year were reviewed. A lively discussion over the many problems of the aging developed. At the termination of this meeting the following recommendations were made:

(1) That the committee endorse the Kerr-Mills Bill and work to implement this legislation locally in order to prove its effectiveness in solving the problems of the medical care of the aging in the State of West Virginia, thereby eliminating the necessity of any Forand-type legislation in the future.

(2) That the physician delegates to the President's Conference on Aging be requested to support and defend the Kerr-Mills Bill in their assigned work groups.

(3) That the committee encourage local county medical societies and auxiliaries to appoint committees on aging and further stimulate local action by making specific recommendations for action in solving the local problems of the medical care of the aging.

(4) That the committee support the recommendations of change of physicians' fee schedule for the MAA program to be presented to the director of the program, Mr. Thomas R. Egbert, by the Medical Economics Committee.

(5) That the committee is in favor of the construction of new, conversion of old, and improvement of present facilities for the progressive continuous care of aged individuals including mental hospitals, half-way houses, general hospitals, nursing homes, homes for the aging, and multi-purpose institutions.

In attempting to comply with the third recommendation, a poll of the local medical societies was carried out in regards to those societies having committees on aging. Nineteen county medical societies out of twenty-eight have appointed local committees.

The second meeting of the Committee on Aging was held in Charleston on March 1, 1961. Resolutions of the previous meeting were reviewed and a lively discussion resulted in regards to the implementation of the Kerr-Mills Bill in West Virginia which is administered by the Department of Public Assistance under the heading of MAA. The following recommendations were made:

(1) That the Medical Economics Committee make further effort to obtain appropriate adjustment of the fee schedules under the MAA program for physicians and medical facilities, including nursing homes.

(2) That the Medical Economics Committee consider the present services to the indigent and medically indigent and develop a progressive program of increase in the services available under both the MAA program and the care of the indigent under the Department of Public Assistance.

(3) That the Medical Economics Committee take appropriate measures to encourage voluntary health insurance programs to include in their coverage services in nursing homes.

Further discussion was carried out in regards to the previous meetings' recommendation of specific recommendations to local committees on aging. It was recommended that the chairman compose specific recommendations which were to be submitted to the members of this committee for their consideration and approval prior to directing these to the local committees on aging.

The following are the recommendations which were distributed to the local committees on aging.

(1) That the local committees on aging encourage and stimulate, or foster the organization of groups for the purpose of construction, maintenance and administration of non-profit nursing homes in their county or counties. Also that the committees seek the support of various service clubs and church groups in connection with this project.

(2) That committee members cooperate with local community organizations in determining the health and medical needs of the aging population of their communities and establish where indicated, appropriate geriatric and well-oldsters' clinics.

(3) That where their is demonstrated a need, they act as a nucleus for the development of comprehensive home care programs which will aid and assist in the care of the aged in their homes, thus minimizing the necessity of their confinement to nursing homes or other medical facilities.

(4) That they encourage and stimulate as well as perhaps organize training programs which would increase the availability of trained registered nurses and practical nurses in all phases of medical care, but specifically in the care of the chronically ill and aging population.

The chairman is to meet with the Medical Economics Committee on June 10, 1961, to discuss the recommendations of the committee on aging which have been directed to this committee.

Respectfully submitted,

George R. Callender, Jr., M. D.,
Chairman.

Charleston,
June 12, 1961.

Cancer Committee

The Cancer Committee of the West Virginia State Medical Association met on November 5, 1960. Material concerning the American Cancer Society and the National Cancer Institute was reviewed and the following conclusions were formed:

The American Cancer Society cooperates closely with the National Cancer Institute. The Director of the Institute is a member of the Society's National Board of Directors and thus participates in formulating and executing the Society's policies. There is a constant exchange of information. There are a number of collaborative projects, one of which is the four quadrennial Cancer Conferences for Research Scientists and Clinicians which have been sponsored jointly by the Institute and the Society. There is close liaison maintained between the two agencies to avoid undesirable duplication of research projects and the consequent waste of funds. The Society is among the sponsors of the National Chemotheraphy Program, which is administered by the Institute.

The ACS can make institutional grants for research, whereas the NCI is restricted through federal legislation to a procedure that requires the grant to be made directly to the research investigator. The former is a more flexible mechanism which is advantageous to the medical school, hospital and/or other research institution.

The NCI Director, Doctor Endicott, stated that the ACS is constantly examining its program in the light of developments in the whole field of cancer research and control. Its officers are convinced, and the National Cancer Institute agrees that the Society should continue its activities along the three main fronts of research, education and services to cancer patients.

From this information, the Committee voted to continue to cooperate with the American Cancer Society and to lend its support to the Cancer Detection Program of the ACS which has been approved by the Council of the West Virginia State Medical Association.

An effective cancer control effort involves all three elements of prevention, diagnosis and treatment. Its purpose is to bring the physician and patient together at the earliest possible moment after the onset of disease for the most satisfactory management of a cancer case.

Its success depends on an alert and well-educated professional group, a cooperative and informed public and the availability of adequate diagnostic and therapeutic services.

These goals can be accomplished only by close cooperation and harmony between the membership of the State Medical Association, the State Health Department, the hospital cancer clinics and the American Cancer Society through their public and professional education program.

The Committee went on record as recommending that a Cancer Committee be set up within the staff of each hospital in West Virginia for the purpose of aiding in reporting new cancer cases and providing a follow-up program.

Respectfully submitted,

Theodore P. Mantz, M. D.,
Chairman.

Charleston,
June 2, 1961.

Insurance Committee

A meeting of the Insurance Committee was held at the Daniel Boone Hotel in Charleston on Sunday, June 11, 1961. The meeting was attended by Dr. Charles A. Hoffman of Huntington, Chairman; and Drs. Herbert M. Beddow and Duke A. Dent of Charleston; Dr. W. P. Bittinger of Summerlee; and Dr. Upshur Higginbotham of Bluefield.

Also attending the meeting were Mr. J. Banks Shepherd and Mr. Robert E. Wise of Charleston, representatives of the McDonough-Caperton-Shepherd-Goldsmith Insurance Agency.

A proposed retirement fund to be administered by officials of the West Virginia State Medical Association and a selected trust department of a bank was discussed in preliminary manner. It was agreed that the idea of such a retirement fund would be of definite value to the members of our Association.

Mr. J. Banks Shepherd, along with the Chairman, was authorized to continue developing a plan to present to the next meeting of the Council which will be held on August 23.

Respectfully submitted,

Charles A. Hoffman, M. D.,
Chairman.

Huntington,
June 12, 1961.

Committee on Maternal Welfare

The Maternal Welfare Committee of the West Virginia State Medical Association met December 4, 1960, and June 11, 1961, at the Daniel Boone Hotel in Charleston. Those attending both meetings were Dr. A. J. Villani, Chairman, and the following members: Drs. Edwin J. Humphrey, Gates J. Wayburn, Harold D. Almond, J. Preston Lilly, Dwight P. Cruikshank III, Gilbert A. Ratcliff, and Frederick H. Dobbs, Secretary.

The Division of Maternal and Child Health of the West Virginia State Health Department was represented by Dr. Jane Freeman, Director, and Ruth Melber, R. N., Nurse Consultant.

The Chairman expressed his appreciation for the splendid cooperation of all members of this committee, for without their valuable assistance in the evaluation of the abstracts and the direction of the long-range program of this specialty the value of this committee would be markedly curtailed.

The Chairman also expresses appreciation to the interested physicians who are cooperating with the committee in this study. The excellent response of the physicians having maternal deaths in completing the questionnaires speaks well of their trust in the function

and purpose of the committee, that of increasing the standard of obstetrics among the physicians of our State. The extensive scope of therapy offered the patients in this study is ample evidence of the high standard of obstetric practice and hospital facilities in West Virginia.

The Obstetric Consultant of the Division of Maternal and Child Health represented the West Virginia State Health Department and the Maternal Welfare Committee, as their Secretary, at the American Medical Association sponsored Southern Regional Conference on the subject of Pregnancy Wastage and the Promotion of Studies of Perinatal Mortality and Morbidity. This data has been presented to the Committee and to the medical staffs of several of the larger hospitals in an effort to get the obstetrical departments to participate in this important duty. The Committee on Maternal and Child Care of the American Medical Association hopes to compile data on every delivery in the United States in the next five years.

The Chairman and several members of the Committee attended the recent American College of Obstetrics and Gynecology meeting giving special attention to the Maternal Mortality Conference on the Status of Maternal Mortality Committees, the Medico-Legal aspects in connection with maternal death studies and perinatal mortality studies, and the proper communication between the interested physicians who have maternal deaths and the committees. Several case studies were presented by leaders in this field with discussions by the whole group. The standard of obstetric practice and the conduct of our Maternal Welfare Committee compares favorably with those in other states.

The Committee has liaison with the Maternal Welfare Committees in Ohio, North Carolina and Massachusetts, receiving copies of published abstracts and reprints of their published statistical studies. The committee has extended its scope of jurisdiction in anticipating the perinatal mortality and morbidity studies which are being conducted at the hospital medical staff level. When this research project becomes statewide a committee sponsored by the State Medical Association will be formed to include this most important study. Perinatal mortality and morbidity problems are so intimately connected with maternal death studies that the present committee could be expanded to include this phase of obstetric-pediatric pathology. Both conferences, the Perinatal Study and the Maternal Mortality Conference recommended that members of the committee be appointed for at least six years, having at least a third of the committee retire every two years. This would maintain a majority of veteran members on the committee at all times and would assure the development of the long-range program of study and improvement.

Doctor Freeman outlined the expanding prenatal and delivery service which is organized and financially supported by funds from the Division of Maternal and Child Health. This service is now available to indigent maternity patients in the following counties: Fayette, Greenbrier, Logan, Kanawha, Putnam, Summers and Wood. The Putnam County Prenatal and Delivery Service Program includes portions of Lincoln, Jackson and Kanawha Counties, with delivery at Herbert J. Thomas Memorial Hospital in South Charleston. The Committee was informed that this type of delivery service could be made available to all indigent patients in West Virginia, but that the program was presently limited by a lack of funds.

Doctor Freeman and Miss Melber explained further the nursing consultant services available in the Division of Maternal and Child Health which offers consultations and assistance to hospitals, public health departments, schools of nursing, and other health and welfare agencies in the improvement of nursing care for mothers and infants. The statistical study of births and deaths were presented by services.

Tabulated Analysis of Committee's Work

The following tables contain the tabulated analysis of the work of the committee for the current year and these studies are submitted for the information of and study by the members of the West Virginia State Medical Association.

The latest statistical survey available for West Virginia between maternal deaths and births is for 1959. In that year there were:

Total Births	42,235
Maternal Deaths	19
Maternal Death Rate	.4

MATERNAL DEATHS, JUNE, 1960—JULY, 1961

I. Classification of Maternal Deaths Reviewed by Committee During the Period of June, 1960-July, 1961.

Year	*Obstetric*	*Non-Obstetric*
1960-1961	15	3* (Medical)

*1 High output cardiac failure; 1 intestinal obstruction, terminal pneumonia; 1 disseminated lupus, erythematosus with nephrotic syndrome.

II. Obstetric Deaths by Cause (1960-1961)

Cause of Death	*No.*	*% of Total*
Hemorrhage	4	26.6
Toxemia	3	20.
Pulmonary Embolism	2	13.3
Oversedation	1	6.7
Infection	1	6.7
Postpartum Hemorrhage with Uterine Atony	2	13.3
Bronchopneumonia with Pulmonary Edema	1	6.7
Rupture of Uterus with Postpartum Hemorrhage	1	6.7
Total	15	100. %

III. Obstetric Deaths by Preventability (1960-1961)

Classification	*No.*	*% of Total*
Preventable by Physician	4	26.6
Preventable by Physician and Patient	1	6.7
Preventable by Consultant	1	6.7
Preventable by Physician and Consultant	1	6.7
Preventable by Patient and Hospital	1	6.7
Preventable by Abortionist	2	13.3
Non-Preventable	5	33.3
Total	15	100. %

IV. Obstetric Deaths by Place of Delivery (1960-1961)

Place	*No.*	*% of Total*
Hospital	10	66.7
Office-Clinic	1	6.7
Undelivered	4	26.6
Total	15	100. %

V. Obstetric Deaths by Race (1960-1961)

Race	*No.*	*% of Total*
White	12	80.
Negro	3	20.
Total	15	100. %

VI. Obstetric Deaths by Age Groups (1960-1961)

Age Group	*No.*	*% of Total*
15-19	4	26.6
20-24	3	20.
25-29	1	6.7
30-34	2	13.3
35-39	4	26.6
40-44	1	6.7
Total	15	100. %

VII. Obstetric Deaths by Parity (1960-1961)

Parity	*No.*	*% of Total*
Primipara	7	46.7
1-3	4	26.6
4-6	3	20.
7 and over	1	6.7
Total	15	100. %

VIII. Obstetric Deaths by Weeks of Gestation (1960-1961)

Weeks of Gestation	*No.*	*% of Total*
Less than 28 weeks	4	26.6
28-33 weeks	1	6.7
34-39 weeks	3	20.
40 plus	7	46.7
Total	15	100. %

IX. Obstetric Deaths by Operative Procedure (1960-1961)

Procedure	*Preventable*	*%*	*Non-Preventable*	*%*
Cesarean	1	10.		
Version and Extraction	1	10.		
Post-mortem Cesarean	1	10.		
Median Episiotomy and low Forceps	1	10.		
Midline Incision	1	10.		
Laparotomy	1	10.		
Abortion	1	10.		
Low Forceps			1	20.
Low Forceps over a Right Medio-lateral Episiotomy			1	20.
None	3	30.	3	60.
Total	10	100. %	5	100. %

X. Obstetric Deaths by Type of Consultation (1960-1961)

Type of Consultant	*No.*	*% of Total*
Obstetrician	3	Percentages cannot be calculated because some patients were seen by more than one consultant. But it is significant that 46.7% had no consultation.
Surgeon	4	
General Practitioner	1	
Internal Medicine	1	
None	7	

XI. Interval Between Delivery and Death (1960-1961)

Time Interval	*No.*	*% of Total*
Under 1 day	9	60.
1 day - 1 week		
1 week plus	1	6.7
Post-mortem Cesarean	1	6.7
Undelivered	4	26.6
Total	15	100. %

XII. Outcome of Pregnancy in Obstetric Deaths (1960-1961)

Type of Outcome	*No.*	*% of Total*
Stillbirth	5	33.3
Livebirth—full term	4	26.6
Livebirth—premature	1	6.7
Incomplete Abortion	1	6.7
Undelivered	4	26.6
Total	15	100. %

XIII. Medical Deaths Associated with Pregnancy (1960-1961)

1 High output cardiac failure
1 Intestinal obstruction, terminal pneumonia
1 Disseminated lupus, erythematosus with nephrotic syndrome

3 Total

XIV. Analysis of Obstetric Death Certificates (1960-1961)

	No.	*% of Total*
Death Certificate Correct and Complete	14	93.3
Death Certificate Incorrect	1	6.7
Total	15	100. %

XV. Autopsies Done on Obstetric Deaths (1960-1961)

Autopsy Obtained	4	26.6
Autopsy not Obtained	11	73.4
Total	15	100. %

Definitions

1. *Maternal Death*—The death of any woman dying of any cause whatsoever while pregnant or within six months of the termination of the pregnancy, regardless of the duration of the pregnancy at the time of the termination or the method by which it was terminated.
2. *Direct Obstetric Cause of Death*—A death resulting from complications of the pregnancy itself, to intervention elected or required by the pregnancy or resulting from the chain of events initiated by the complication or the intervention.
3. *Indirect Obstetric Cause of Death*—A death resulting from disease before or developing during pregnancy (not a direct effect of the pregnancy) which was obviously aggravated by the physiological effects of the pregnancy and caused the death.
4. *Non-Related Cause of Death*—A death occurring during pregnancy or within 90 days of its termination from causes not related to the pregnancy nor to its complication or management.
5. *Factors of Preventability (Avoidability)* — Preventability should be judged in an ideal academic sense. This concept involves three assumptions. First, the physician possessed all the knowledge currently available relating to the factors involved in the death. Second, by experience, he had reached a high level of technical ability. Third, he had available to him all the facilities present in a

well-organized and properly equipped hospital. Because of the austerity of these criteria, it is more desirable to determine avoidable factors involved in the death, rather than to label the death as preventable. This allows more specific discussion resulting in better maternal care and reduction of obstetric causes of death.

6. *Factors of Responsibility*—Responsibility should be determined whenever possible and assigned as appropriate to the attending physician, consultant, midwife, hospital, patient, or any combination.

Factors

A. *Professional Factors*—These are concerned with cases where there appear shortcomings in diagnosis, judgment, management, and technique, and include failure to recognize the complication or evaluate it properly. They also include instances of injudicious haste, delay or timing of operative intervention, and failure to utilize currently acceptable methods of treatment. Finally, they would include services which were technically inept, and those failures which could have been averted by proper and timely consultation.

B. *Hospital Factors*—These are concerned with facilities, equipment, or personnel which are inadequate. In terms of modern obstetrics the hazards of delivery cannot be met successfully unless the hospital provides, (1) a separate, well-directed maternity section; (2) a blood bank; (3) competent 24-hour anesthesia service; (4) suitable x-ray facilities; and (5) adequate 24-hour laboratory facilities.

C. *Patient Factors*—These should be recognized, but never as an excuse for professional inadequacy. They are concerned with death resulting from a complication for which there is generally successful treatment but which the patient denied herself by delaying her initial visit to the physician, delaying obtaining medical care after the symptoms were obvious at a layman's level, or finally, by not following the advice and instructions of her physician.

D. *Undetermined Factors*—If because of inadequate evidence a clear-cut decision cannot be made, yet short-comings in care are apparent, it would be preferable to indicate that responsible factors are undetermined. An attempt should be made to determine preventability and to locate the responsible factors.

Analysis of Maternal Deaths

The Committee presents the following conclusions from the analysis of these maternal deaths:

1. Hemorrhage again heads the list as to cause of death with 26.6 per cent and two cases (13.3 per cent) of postpartum hemorrhage with uterine atony.
2. Toxemia of pregnancy caused three deaths which is an unusually high rate because there were no deaths from toxemia in 1959, and only one death in 1960. One death from toxemia occurred in a primigravida in the sixth month of pregnancy who suddenly developed a fulminating hypertension, convulsions and death in a matter of minutes. Unfortunately, an autopsy was refused, making the final diagnosis a matter of conjecture.
3. The one death from infection was caused from perforation of the uterus in an attempted abortion; the second death caused by an abortionist resulted in an air embolism causing death at the time of the uterine manipulation.
4. There were three indirect obstetric causes of death: (1) High output cardiac failure; (2) Intestinal obstruction, terminal pneumonia, and (3) disseminated lupus erythematosus with nephrotic syndrome—(this patient's mother died from the same disease several years ago and not in the pregnant state).
5. The figure of 46.7 per cent of maternal deaths preventable by the physician and the consultant is no improvement over our previous rate and it is this area that the Committee can do its greatest good by increasing the standards of practice and modernize our hospital facilities with special emphasis on blood banks and laboratory procedures. There are remaining vast rural areas where a modern hospital will improve the standards of obstetric practice in these areas.

Respectfully submitted,

A. J. Villani, M. D.,
Chairman.

Frederick H. Dobbs, M. D.,
Secretary.

June 16, 1961.

Medical Economics Committee

This Committee's primary concern has been the part that organized medicine plays in the activation of Medical Care of the Aged under the Kerr-Mills bill. In special session the West Virginia Legislature passed enabling legislation in early October, directing the State Department of Public Assistance to assume operating control and appropriated funds for its operation until March 31, 1961.

Your Committee was in frequent conference with the DPA and in early December regulations and fee schedules were published. There was difference of opinion regarding several fees, many of which were adjusted later. At the present time most of the criticism received is based upon fees for anesthesia, which, like those for surgery, are based upon 75 per cent of the Charleston-Huntington Blue Shield service contract, and we must agree with the Director of the DPA that increases in MAA anesthesia fees can only follow an increase in the basic Blue Shield fee schedule.

During the first quarter of 1961, 4391 applications were approved. The average hospital stay was 7.7 days at an average cost of $130 per patient. The medical fees averaged $50 per patient.

The response to the MAA program, which is admittedly not perfect, has been very favorable. Your Committee wishes to thank Doctor Hash and Mr. Lively for their assistance in the activation of this program.

Respectfully submitted,

James S. Klumpp, M. D.,
Chairman.

Huntington,
May 19, 1961.

Medical Education and Scholarships Committee

A meeting of the Medical Education and Scholarships Committee was held at the West Virginia University Medical Center in Morgantown on Sunday, May 14, 1961.

Committee members attending the meeting were Dr. J. P. McMullen of Wellsburg, chairman, and Drs.

Carl B. Hall and Russel Kessel of Charleston, Joe N. Jarrett of Oak Hill, and Dean Clark K. Sleeth of Morgantown. The meeting was also attended by Dr. John W. Hash of Charleston, president of the State Medical Association, Dr. Kenneth E. Penrod, Vice President, Medical Center, and Messrs. Larry Hemmings and Glenn Buchanan, two of the past recipients of medical scholarships.

Doctor McMullen reviewed the duties of the committee and the minutes of the last meeting held in 1960. He pointed out that the scholarship application form had been reviewed and found to be adequate. He also stated that West Virginia Day at the Medical Center was to be coordinated by the committee and members of the faculty at the Center.

The matter of the establishment of a loan fund for out-right gifts to students was tabled until a future meeting of the committee. The members also discussed at length the sharp decrease in the number of qualified students applying for entrance to medical schools throughout the country. It was agreed that physicians must make every effort to point out the merits of a career in medicine to qualified students. It was pointed out that competition from other professions and the length of time it takes to complete a medical education are among the problems that must be met and solved.

It was agreed by the members present that a recommendation be made to the House of Delegates that this committee be authorized to establish a program to promote and influence an increase in the number of applications to medical schools.

The committee also approved a motion that the three previous recipients of medical scholarships, Larry Hemmings, Terry T. Tallman and Glenn Buchanan, be granted a continuance of their scholarships for the coming school year.

Sixteen applications for the 1961 scholarships award were interviewed and the committee unanimously selected Mr. Clare D. Edman as the recipient. The alternate choice was Mr. John E. Holman of Wheeling.

Respectfully submitted,

J. P. McMullen, M. D.,
Chairman.

Wellsburg,
May 18, 1961.

Committee on Medical Emergencies and Civil Defense

During the past year a great deal of impetus was supplied to medical disaster work and planning in our State by the Health Mobilization Division of the State Health Department. This newly established office is headed by Mr. Samuel J. Hawkins, under the direction of Dr. N. H. Dyer.

The need for greater efforts in disaster planning was recognized by President John Hash. He evidenced his interest by requesting the Chairman of this Committee to discuss the topic as a guest writer on the President's Page of the February issue of *The Journal.*

Society Disaster Committees

Component Societies were urged by the Association to organize or activate Disaster Committees. The response to this has been fair. Thirteen societies have indicated the names of the chairmen of their disaster committees; 15 have furnished no information in this regard.

Hospital Disaster Plans

1. A written survey of all hospitals in the State was made to determine the status of their disaster plans.

2. Disaster exercise in "Operation MoHar."

The disaster plans of the hospitals of Charleston and South Charleston and the emergency health facilities of the Kanawha Valley were tested on April 22, 1961, when a full-scale disaster drill was staged in Charleston. This program, which was organized by the Disaster Committee of the Kanawha Medical Society and operated in joint sponsorship with Civil Defense authorities, simulated a plane crash from which 152 casualties were cared for in the hospitals in Charleston and South Charleston.

This exercise proved most effective in demonstrating the strong points and the deficiencies in the hospitals' emergency plans.

This exercise was documented in colored slides by the Charleston Camera Club. These slides will be made available to component societies in order to encourage other areas to undertake a similar drill. Slides can be obtained from the Kanawha Medical Society's office.

A report on "Operation MoHar" was presented at the Public Health Meeting in Clarksburg on May 10, 1961.

Civil Defense Emergency Hospital

A 200-bed Civil Defense Emergency Hospital, which has been stored in the South Charleston Hygienic Laboratory area has been made available to medical groups for training in assembling this unit for emergency usage.

The staff of Thomas Memorial Hospital had undertaken the assignment of training themselves for this project. They, in turn, will train staffs of the larger Charleston hospitals. Groups from other areas of the state, in which the Civil Defense hospitals have been stored, will then be trained on a rotating basis by these staffs in the Charleston area.

Para-Medical Personnel Training

In accordance with standard health mobilization procedures, a program has been undertaken to train essential health professional groups in the state. Doctor Dyer's office implemented the formation of a committee comprised of these various groups. Under the direction of Dr. J. A. B. Holt of Charleston, a Civil Defense Advisory Committee of the para-medical personnel of the State of West Virginia, was formed. A course has been outlined, including lectures with slides, which will be presented to these various groups. Each group, in turn, will further instruct and train

their organizations regarding the proposed emergency program.

Respectfully submitted,

E. J. Ryan, M. D.,
Chairman.

Charleston,
June 9, 1961.

Public Service Committee

The Public Service Committee during the year 1960-61 has attempted to lay the basic groundwork for a sound public service program for organized medicine throughout the State. From this beginning public service committees in the years ahead should expand and go on to much fuller and more comprehensive programs.

Good public relations depends upon the performance of the entire medical team, not just of a few "stars." Every doctor must practice individual public relations, but these public relations efforts must be integrated and supplemented by more formalized campaigns by his medical societies.

The ultimate aim of public relations programs is to win and sustain as many friends for medicine as possible. The public must learn to identify the humanitarian and public interest attitudes and actions, which comprise good medical public relations, not just with one doctor, but with the entire medical profession.

We are aware, I am sure, that organized free enterprise medicine has been forced into a defensive position by forces that threaten the very foundation of society as we know it. We must make our voice heard by bringing the *truth* to the public, frequently, constantly, and by using every effective means of communication. These are things that we have been failing to do.

Your Public Service Committee has had two formal meetings during the past year at the Daniel Boone Hotel in Charleston. Representatives from the Woman's Auxiliary to the State Medical Association were invited and were present at the second meeting.

The following points concerning the functions of the Public Service Committee were agreed upon at the first meeting of the committee held on November 17, 1960.

(1) Initiation of an effective overall program for public education, and to strengthen the image of the medical profession in the minds of the public.

(2) The program adopted should have continuity of action from year to year.

(3) Closer liaison and frequent consultations should be maintained between public service committees on both state and local levels.

(4) Societies which do not have public service committees are urged to appoint such committees.

(5) Each county chairman is requested to send to the state chairman a copy of the program after adoption.

(6) It is urged that the help and cooperation of the Woman's Auxiliary be enlisted in implementing programs.

The Committee decided to concentrate upon the following four basic fields of endeavor during the year:

(1) Emphasizing the Role of the Physician as a Good Citizen. It is important that physicians be encouraged to participate to a greater extent in the various functions of the community, i. e., as members of boards of education, civic and service clubs, school activities, etc.

(2) Getting the Message of Medicine Across to Laymen.

(a) The accomplishments of medicine in bringing about a happier, healthier, longer life.

(b) The work performed by physicians and allied services should be publicized so that the public might better understand the role of the medical profession in the community.

(c) A functioning and alert speakers bureau in each society, and

(d) Types of charitable services performed by members of local societies in offices, clinics and hospitals should be brought to the attention of the general public.

(3) Complete Analysis of Problems of Aging on the local level. Break down the following problems: (a) Social, (b) Economic, (c) Psychological, and (d) Medical.

(4) Careers in Medicine and Allied Fields. It is requested that component societies begin work immediately in this field:

(a) Future Doctor's Clubs

(b) Meetings with high school students and parents, and

(c) Hospital tours, etc.

The response and cooperation of the county medical societies has been encouraging to date. Many of the county societies have initiated definite programs as outlined, have active Speakers Bureaus, and have programs on Medical Careers and Allied Fields. However, there still remains much to be accomplished, and much effort to be expended in overcoming the inertia and complacency that is present.

Your Chairman wishes to express his appreciation to those county societies that cooperated with the program. He also wishes to extend his thanks to the members of the Committee, the Executive Secretary and staff of the West Virginia State Medical Association for their assistance and cooperation.

Respectfully submitted,

Charles L. Goodhand, M. D.,
Chairman.

Parkersburg,
June 14, 1961.

Tuberculosis Committee

The Tuberculosis Committee of the West Virginia State Medical Association met in the office of the chairman on Sunday, February 5, 1961, at 10:30 A. M. Dr. Leon A. Dickerson of the West Virginia State Department of Health, Mr Hupp Otto, President of

the West Virginia Tuberculosis and Health Association, and Mr. T. A. Deveny, Jr., met with the committee. Because of the severe snow, the attendance was quite limited and minutes are being circulated for approval by all members of the committee.

The Tuberculosis Committee of the West Virginia State Medical Association had been asked by the West Virginia Tuberculosis and Health Association to approve the recommendations of the Arden House Conference. Doctor Dickerson outlined what had been done by the State Health Department to implement these recommendations.

The Tuberculosis Committee of the West Virginia State Medical Association approves in principle the recommendations of the Arden House Conference and urges the State Health Department and the West Virginia Tuberculosis and Health Association to aid in the implementation of these recommendations.

Respectfully submitted,

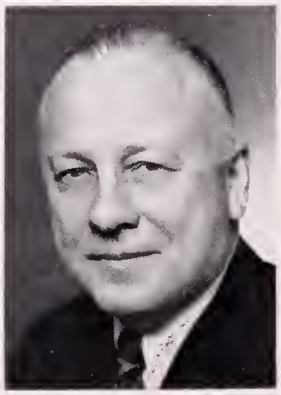
William L. Cooke, M. D.,
Chairman.

Charleston,
April 12, 1961.

1961
PROGRAM COMMITTEE

Halvard Wanger, M. D.
Chairman

Hu C. Myers, M. D.
Philippi



Thomas H. McGavack, M. D.
Martinsburg

The West Virginia Medical Journal

September, 1961 Vol. 57, No. 9

Surgery for Deafness in Otosclerosis

William C. Morgan, Jr., M. D.

Otosclerosis is a disease of bone, of unknown etiology which has a predilection to occur at the oval window of the cochlea and fix the stapes. The footplate of the stapes is inserted in the oval window and its fixation results in a partial block to the entrance of sound waves to the inner ear, resulting in a conductive deafness. The disease can cause a nonreversible perceptive or sensorineural loss by involving the inner ear in some manner, but is more commonly diagnosed when it results in a conductive defect. Sound reception in humans depends on a functioning cochlea (inner ear) with an intact transmission system bringing the vibrations through the patent ear canal to the drum and then by way of the ossicular chain (malleus, incus and stapes) to the oval window entrance. In addition, sound protection is required at the round window, and is afforded by the intact drum and the anatomical situation of the window itself (Figure 1).

Two Million Cases in U. S.

It has been estimated that 2,000,000 persons in the United States suffer from otosclerotic conduction deafness. In practice the diagnosis is one of exclusion, in that obvious causes of conduction deafness by visible pathology are absent, i. e., perforated drum, obvious disease with suppuration, or serous otitis media (fluid in the middle ear). The usual patient will present himself with progressive deafness of some duration, perhaps years and has tinnitus. He hears better in noisy surroundings than in quiet ones (paracusis willisiana). He demonstrates a negative Rinné. (A vibrating tuning fork is heard longer when applied over the mastoid than when held near the external auditory meatus. In normal subjects and in perception deafness, the reverse, or positive Rinné, is seen). The tympanic membrane usually is intact and normal in appearance.

Submitted to the Publication Committee, April 14, 1961.

The Author

- **William C. Morgan, Jr., M. D., 1106 Virginia Street, E., Charleston 1, W. Va.**

Some Aspects of Otosclerosis

Otosclerosis is more common in women, and frequently there is a distinct increase in hearing loss during periods of stress such as pregnancy. There is a familial tendency, and multiple occurrence among siblings is common. Unilateral cases are seen but bilateral involvement is expected more frequently. Further otologic examination including pure tone audiograms will show an air-bone gap in that the bone conduction of sound will be better than that by air (Figure 2). Some depression of bone conduction may be present due to the fixation of the stapes and immobilization of the inner ear fluid. This gives a dip in the bone conduction audiogram that is known as the "Carhart notch."

Advent of Cure

Definitive surgery has been possible since Lempert[1] introduced the one-stage lateral semicircular canal fenestration procedure, often called the "window operation." Rosen,[2] in 1952, reported approaching the stapes through the external ear canal. In 1953,[3] he reported mobilization in detail and described successful cases. Moon,[4] in 1960, published an outline and a discussion of prior stapes surgery as far back as 1875. Rosen's work opened up a new approach to the disease with many advantages.

In the older window procedure, the air-bone gap could be only incompletely closed because

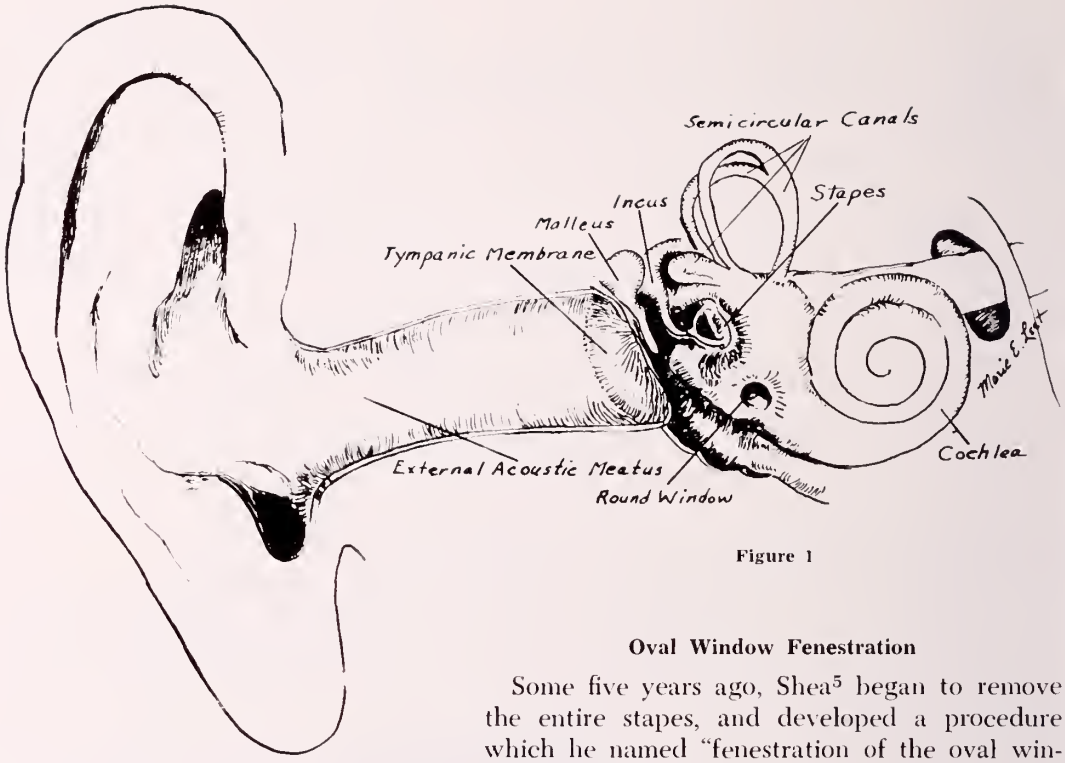


Figure 1

the ossicular chain had to be interrupted. Then, too, the procedure was carried out after partial exenteration of the mastoid cells, leaving a cavity requiring perpetual care. The effects postoperatively were fairly severe, involving prolonged vertigo, hospitalization and after-care. With stapes surgery and the conservation of an intact, functioning ossicular chain, the air-bone gap frequently can be closed entirely, or bettered by reason of erasure of the Carhart notch. Postoperatively, the patient has little or no distress and may return to work within a few days or a week. Except for an initial cleaning of the ear canal in three weeks, the ear is returned to normal, with no more problems than an unoperated ear.

Following stapes mobilization as by Rosen, most operators gradually moved to the footplate of the stapes with chisels, needles and drills to obtain more adequate motion. It became apparent, however, that breaking through a focus of otosclerotic bone would afford only temporary mobility and that fixation would recur within a period of months or years, with recurrent deafness. In this period, Fowler described anterior crurotomy in which the stapes footplate was fractured behind the otosclerosis, the anterior crus or arm of the stapes was removed and the posterior crus and footplate mobilized. This procedure remains useful in selected cases with limited pathology.

Oval Window Fenestration

Some five years ago, Shea[5] began to remove the entire stapes, and developed a procedure which he named "fenestration of the oval window." In this, he covers the open inner ear with a vein graft and re-establishes ossicular continuity by attaching a tubed polyethylene prosthesis to the incus with a point resting on the vein. This procedure has given consistently good results in his hands.[6] Along this general line, Schuknecht[7] removed the stapes and used a fat plug to fill the oval window. The fat was connected to the incus by a fine stainless steel wire. Kos[8] uses a vein plug with stainless steel wire in a similar manner. House[9] described several procedures using polyethylene struts over the partially removed footplate, shattered footplate, and fenestrated window, with gelfoam as a cover for the underlying window. All of these procedures appear to give lasting improvement and represent the ultimate in replacement surgery for otosclerosis at the present time.

In our hands, the vein graft procedure according to Shea has been most successful. Earlier experiences with stapes mobilization were disappointing over a period of three years. The regression rate either in a few months or years was quite high and led us to abandon the procedure. Intermediate procedures with partial mobilization or fenestration of the uninvolved footplate using the polyethylene prosthesis have proved highly successful. It would appear, however, that chances for refixation would be greater than with the Shea procedure.

The Vein Graft Operation: Shea Technique

In the usual case, the operation is done with the patient under local anesthesia and fairly heavy sedation. Careful attention is given the preparation and cleaning of the ear canal. A small segment of vein is removed from the dorsum of the hand. The adventitia is dissected away under the microscope and the vein is cut longitudinally to form a sheet. It is then saved in saline.

Anesthesia of the ear canal is obtained by the injection of 2 per cent Xylocaine in several areas of the external meatus. The proper sized ear speculum (the largest possible) is then inserted in the ear canal and fixed with a specially designed speculum holder. An inverted V-shaped incision (Figure 3) is made in the skin of the canal wall near the rim of the drum and a flap is elevated forward to expose the middle ear. Further anesthesia is obtained using 4 per cent Xylocaine topically in the middle ear. Some of the bony rim of the canal wall is removed by curet to visualize the underlying incus, stapes and facial nerve. Usually the chorda tympani nerve is cut for better visualization. The round window area is examined for possible pathology.

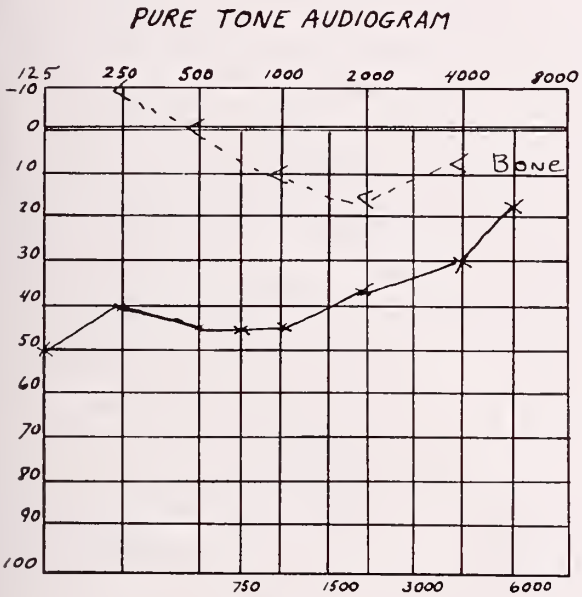


Figure 2

Inspection of the stapes is then carried out with a view to the procedure that may be indicated. At present we are doing vein graft procedures routinely unless the pathology is limited, in which case anterior crurotomy can be done.

The stapedial tendon is cut, the incudostapedial joint is cut through and the superstructure of the stapes (the crura and head) is broken free and removed. Care is taken to preserve the lenticular process of the incus (a small bony projection from the end of the incus) to which the prosthesis will be attached. The mucoperiosteum surrounding the oval window is cut and elevated several millimeters; that over the footplate itself is removed. Bleeding is controlled, bony overhang of the window is removed with a fine drill, and the inferior margin of the window is saucerized by a drill.

The footplate is then penetrated by a pick, or a transverse cut is made with a pointed drill, and the entire footplate is removed carefully by fine,

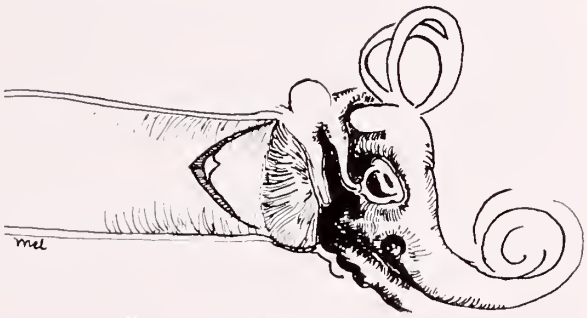


Figure 3

right angle picks, exposing the perilymph-filled vestibule of the inner ear. The vein is then placed over the open vestibule previously occupied by the stapes, and is carefully adjusted to fit the contours of the window margins. The elevated mucoperiosteum is then replaced on top of the peripheral margins of the vein. A length of No. 90 polyethylene tubing is cut as shown in Figure 4 and is attached to the lenticular process of the incus with the point touching the vein. At this stage the patient generally will experience considerable hearing improvement. The drum and canal wall flap is then replaced in its normal position and gelfoam patches saturated with adrenalin are applied along the incision. A cotton plug is placed in the external meatus and the patient is instructed to remain in bed with the operated ear away from the pillow for twenty-four to forty-eight hours.

The Time Element in Evaluation of Results

Usually, the patient will experience hearing loss in a few hours, but if the operation has been successful, hearing will return gradually or, occasionally, suddenly, in two to three weeks. From three to six weeks are required to evaluate the results of surgery. In most series of the stapes operations, using stapedectomy and replacement by wire or polyethylene and a tissue graft, good to excellent results are obtained in 85 per cent or more of cases. Untoward results, in the form either of poorer hearing or a dead ear, occur in from 1 per cent to 2 per cent of cases.

Postoperative Problems Minimal

Postoperatively, the patient has few problems. Only an occasional patient complains of brief loss of taste occasioned by section of the chorda tympani nerve. Also it is a rather rare patient who has postoperative dizziness of significance. Pain is present for only a few hours soon after surgery, and is easily controlled. Infection is extremely rare but, since the consequences of infection would be severe, antibiotics are routinely administered preoperatively and after surgery.

After-Care

The principal instructions given the patient on leaving the hospital are to refrain from blowing his nose (prevention of increase in middle ear pressure) and to avoid getting water or other foreign material in the operated ear (prevention of infection).

Techniques and Results in Forty-Four Cases

In our series of 44 consecutive cases of stapes operations, 24 were done by oval window fenestration, with vein graft and polyethylene prosthesis. Twenty were done by one of the several

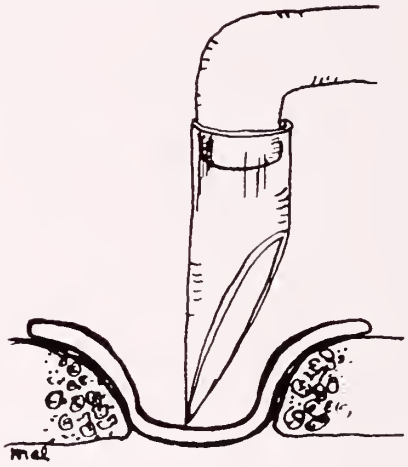


Figure 4

intermediate procedures. Our results are reported according to the procedures used. Results are considered satisfactory if the air-bone gap is closed or bettered, or if the patient has hearing better than 30 decibels in the speech frequencies of 500, 1,000 and 2,000 cycles. Our patients have had follow-up hearing checks for 3 to 17 months.

The intermediate procedures used in the 20 cases consisted of anterior crurotomy, footplate shattering, footplate fenestration, partial mobilization of uninvolved bone, and total mobilization with slight depression of the footplate into the vestibule.

In 17 of the 20 cases, satisfactory results were obtained. Of the three cases in which the results were unsatisfactory, the patient in one case had an initial good result but had hearing loss again at five months. He was operated on again, the strut found to be too short, and a vein graft procedure was then carried out successfully. In the second case the result was good but the patient is gradually losing hearing at 12 months, not yet to the 30 decibel level. He will be reoperated on if the loss continues. The patient in the third case has had some hearing loss as a result of surgical trauma which could not be avoided. One patient with a good result has had two attacks of suppurative otitis media but has maintained good hearing after recovery from each infection.

Of the 24 cases in which oval window fenestration with vein graft was used, the patients in 21 have good hearing results. Of the three patients with unsatisfactory results, one has hearing loss greater than his preoperative level at three months. In the two cases remaining, the hearing continues unchanged at four and six months. One of the patients is a child. Both are to be reoperated upon.

Not included in this series of cases are 30 oval window fenestrations which have less than a three-month follow-up. The results appear to be uniformly good as of this writing, and the cases are mentioned because of the finding of oval window closure in three. Recurring bony closure is anticipated here, on the basis of previous experience cited in the literature.

Checking by Speech Audiometry

As a routine measure, we recently began to check patients preoperatively by speech audiometry and the postoperative follow-up will be done in the same manner. This practice not only will provide us with a better means of follow-up with regard to the most important result expected of the surgery, i. e., the actual improvement in the patient's speech reception, but will be of great benefit in preoperative evaluation.

Summary

An attempt is made to present an uncomplicated picture of modern thinking with regard to surgery for otosclerosis. Personal experience with the various procedures is discussed and our results would seem to compare favorably with those reported in larger series.

Our current "routine" procedure in surgery is described. Oval window surgery has much to offer the patient with otosclerotic deafness, and many who would be less than ideal candidates for lateral canal fenestration can enjoy excellent results with stapes surgery.

Much credit is due the original work and many contributions of such men as Rosen, Shea, House, Schuknecht and Shambaugh.

References

1. Lempert, J.: Improvement in Hearing in Cases of Otosclerosis: A New One-Stage Surgical Technique, Arch. Otolaryng. 28:49-97 (July) 1938.
2. Rosen, S.: Palpation of Stapes for Fixation, A. M. A. Arch. Otolaryng. 56:610 (Dec.) 1952.
3. Rosen, S.: Mobilization of the Stapes to Restore Hearing in Otosclerosis, New York State J. Med. 53:22 (Nov. 15) 1953.
4. Moon, C. N., Jr.: Stapes Surgery: Past, Present and Future, Virginia M. Monthly 87:76 (Feb.) 1960.
5. Symposium[7]: Operation for Mobilization of Stapes in Otosclerotic Deafness, Laryngoscope 66:129-784 (July) 1956.
6. Shea, J. J., Jr.: Fenestration of the Oval Window: Four-Year Report, J. A. M. A. 174:2181-2186 (Dec.) 1960.
7. Symposium[5]: Stapes Mobilization Two Years Later, Laryngoscope 86:1403-1441 (Aug.) 1958.
8. Kos, C. M.: Results of Stapes Mobilization and Vein Plug Stapedioplasty, J. A. M. A. 174:2187-2191 (Dec.) 1960.
9. House, H. P.: Trends in Mobilization Surgery, Laryngoscope (Aug.) 1959.

Wordsmanship, No Less

The suffix "ship," according to that vade mecum of the grammarian, Fowler's Dictionary of Modern English Usage, has as its purpose to provide a concrete noun with an abstract meaning, as in the case of friend, horseman, clerk, lord and so forth. Gamesman, roundsman, brinksman and similar concrete terms to which the stately suffix is appended are not mentioned, Fowler having departed this life, his work completed, before these examples of linguistic inventionship became abstract partners with the language. For Fowler such rearguardsmanship was happily denied, although those who have inherited the successorship to Noah Webster have succumbed, either unwittingly or supinely, to a universal pressure in favor of taking the vessel in tow.

If all other things were equal; if relation did not stand by itself in its abstract sense of denoting the mode in which two or more things stand to each other, or the state of being mutually or reciprocally interested, then the prevalent use of "relationship"—as between doctor and patient—might be condoned. As it is, why pick a long word to do a job for which a short one is eminently suited?

Relation, relationship and relative have had a confusing passage through the devious channels in which language flows. Relative started as an adjective meaning related or having a connection of some sort, or denoting a relation between two or more things or ideas. Eventually, however, having come to be used also as an abbreviation for a related person, it became a noun standing for persons between whom kinship—or relationship—exists.

Since relation is also used, especially by the British, to denote a relative, relationship has its only logical place in the language in expressing this relationship of kinship. Unfortunately, as Fowler himself sadly wrote (in relation to another point in grammar), "What grammarians say should be has perhaps less influence on what shall be than even the more modest of them realize; usage evolves itself little disturbed by their likes and dislikes."

The case in favor of relation and against relationship except in a restricted sense having thus been clearly presented and incontrovertibly proved, it may be pertinent to recall a luncheon-table conversation about the sinking of the Titanic that took place in the Harvard Club of Boston, on the anniversary of that melancholy event. "I had relations on the Titanic," one discussant modestly admitted. "With whom?" was the spontaneous interrogation of his fellow Harvardmen, striving for their own scholarly version of one-upmanship.—The New England Journal of Medicine.

Postprandial Blood Chemistry*

Herman Fischer, M. D., and Lougenia Hill, M. T.

UNTIL Annino and Relman,[3] in 1959, conducted their experiment, it was generally conceded that the only translatable blood chemistry determinations were those performed on fasting specimens.[1, 2] As Annino pointed out, the effects of ingesting large amounts of certain substances are well known. Indeed, these effects are commonly used in diagnostic work, e. g., the glucose tolerance test. Fasting specimens, on the other hand, necessarily are obtained at hours inconvenient both for the patient and the technician.

It is our purpose to restudy parts of Annino and Relman's paper and to report our results in similar studies on other chemical constituents of the blood. Whereas Annino and Relman, in their study, used certain controls such as special diets, normal individuals, equal distributions by sex and the division of their group into those of old and young age, we made little attempt at controls.

Method

Seventy persons, all volunteers, were used in the experiment. They ranged in age from 18 to 57 years. Sixty-three were female, 7 were male. Many were hospital employees; the remainder were hospital patients who had been admitted with complaints of a minor nature, their ailments including cystitis, neurosis, intervertebral disc problems, tachycardia, nausea of undetermined origin and muscle strain.

We used accepted routines in our analytic work and employed our usual methods of quality control. The regular hospital menu was served for breakfast and lunch; no special diets were used.

Blood specimens were taken in the fasting state and at 150 to 180 minutes after breakfast, and again at 90 to 120 minutes after lunch. Table 1 shows the determinations performed and the mean at each interval. Table 2 shows the same determinations and the standard deviation at each interval. The means and the standard deviations were then analyzed for their statistical significance using the Fisher "T" test.

*From the Department of Pathology, St. Mary's Hospital, Clarksburg, W. Va.

Submitted to the Publication Committee, April 13, 1961.

The Authors

- **Herman Fischer, M. D., Pathologist and Director of Laboratories, St. Mary's Hospital, Clarksburg, W. Va.**
- **Lougenia Hill, M. T., St. Mary's Hospital, Clarksburg, W. Va.**

Table 1

Mean Values*

Analysis	*Fasting*	*After Breakfast*	*After Lunch*
Glucose	82.0	82.0	94.0
Urea nitrogen	15.7	15.4	16.5
Nonprotein nitrogen	39.0	36.0	40.0
Cholesterol	154.0	163.0	165.0
Sodium	147.0	145.0	144.0
Potassium	4.6	4.7	4.5
Alkaline phosphatase	3.62	3.08	3.67
Calcium	11.0	11.5	11.3
Icterus index	4.9	5.4	5.3
Bilirubin	0.24	0.25	0.29
Phosphorus	3.4	3.2	3.5
Protein	7.8	8.1	8.3
Creatinine	1.05	1.09	1.15
Thymol turbidity	3.65	3.9	4.8

*(Sodium and postassium reported in mEq/L.
(Calcium and phosphorus reported in mg. %.
(Phosphatase reported in Shinowara-Jones-Reinhart
(units.

Table 2

Standard Deviations (Plus or Minus)

Analysis	*Fasting*	*After Breakfast*	*After Lunch*
Glucose	18.8	21.1	12.0
Urea nitrogen	3.55	3.88	5.0
Nonprotein nitrogen	10.5	7.65	10.0
Cholesterol	36.0	37.6	31.5
Sodium	5.3	4.6	5.4
Potassium	0.5	0.61	0.35
Alkaline phosphatase	1.1	0.88	1.15
Calcium	1.8	1.69	1.3
Icterus index	1.5	1.84	1.9
Bilirubin	0.17	0.024	0.15
Phosphorus	0.53	0.6	0.67
Protein	0.53	0.7	0.57
Creatinine	0.22	0.14	0.27
Thymol turbidity	1.87	2.4	2.32

The mean values of the fasting specimens agree with those of similar data reported in the literature. In general, the means for the specimens collected at the after-breakfast and after-lunch intervals do not differ materially from those of the fasting specimens. Although certain slight increases appear for glucose, cholesterol, icterus

index, protein and thymol turbidity, none falls within the pathologic range nor conveys information beyond the extent of that furnished by the fasting means.

On analyzing these means and their standard deviations by the Fisher "T" test, we compared the fasting means and their standard deviations with those for the after-breakfast and after-lunch intervals. It was noted that none of the differences was significant at the 1 per cent level, which is not surprising when we examine the tables. Those determinations exhibiting a slight change in the mean values also have the greatest standard deviations, which suggest that in a larger series of tests, the apparent differences would level out.

Discussion

Our results compare favorably with those of Annino and Relman. They indicate that ingestion of a normal breakfast or lunch does not interfere with the results of blood analysis for certain chemical constituents if a waiting period of two to three hours between the ingestion of the meal and the drawing of the blood specimen is observed. Although some of the blood chemicals do exhibit a slight change in mean value, it is compensated for by the standard deviation of that particular analysis and the results still are valid and useful.

Summary

Blood specimens were obtained from 70 volunteers. In any one day each volunteer donated blood in the fasting state, at a 150-180 minute interval after a normal breakfast, and at a 90-120 minute interval after a normal lunch. The specimens were analyzed for glucose, urea nitrogen, nonprotein nitrogen, cholesterol, sodium, potassium, alkaline phosphatase, calcium, icterus index, bilirubin, phosphorus, protein, creatinine and thymol turbidity. Comparison of results indicates that there is no statistical difference in these chemicals on analysis of blood specimens taken at the intervals observed in our experiment.

References

1. Todd, Sanford & Wells: Clinical Diagnosis by Laboratory Means, ed. 12, Philadelphia, W. B. Saunders Company, 1953.
2. Kolmer: Clinical Diagnosis by Laboratory Examinations, ed. 2, New York, Appleton-Century-Crofts, Inc., 1949.
3. Annino, J. S. & Relman, A. S.: Effect of Eating on Some of the Clinically Important Chemical Constituents of the Blood, Am. J. Clin. Path. 31:155-159 (Feb.) 1959.

Never Ending Influence

There is a sentence in The Education of Henry Adams which reads "A teacher affects eternity; he can never tell where his influence stops." So it also is with the doctor. Let me cite just one among countless examples: A little peasant boy in the Tyrol afflicted with hemophilia lost a tooth and was literally bleeding to death. The normal coagulants could not save him, and transfusions were barely keeping him alive. In Vienna, medical people were contacted. An American suggested that only a serum made in Michigan would save him. The cry for help went out. An Air Force jet fighter flew the serum from Michigan to Westover Field, Massachusetts. From there, it was ferried to Munich. At this point, a raging blizzard made the rest of the trip extremely arduous and dangerous. Nevertheless, by plane and jeep, the serum got to Innsbruck at the eleventh hour, and the little boy was saved.

The effect of this achievement was spectacular. It excited the imagination and admiration of all Austria, indeed of Europe itself. Weighty distinctions between American and Soviet policies suddenly became less important than the instinctive humanity of the United States in throwing its mighty resources into a splendid effort to save one human creature.

Here we see that half-way around the world and in a manner far removed from the immediate object of the research by the American medical scientists who had developed the life-saving serum, their influence had manifested itself in a diplomatic success for the United States.—U. S. Senator John Sparkman in Journal, Med. Assn., State of Alabama.

Congenital Diaphragmatic Hernia in the Newborn*

(Case Report)

Louis A. Vega, M. D., F. L. Johnston, M. D., and A. J. Villani, M. D.

The presence of abdominal viscera in the thorax usually is referred to as diaphragmatic hernia, whether the path be through an actual rent in the diaphragm, a naturally occurring aperture, or through a defect due to faulty development.

Relatively little has been published concerning the hazards and the operative management of congenital posterolateral diaphragmatic hernia in the early neonatal period. Indeed, Campanale and Rowland,[1] in 1955, reviewed the literature and stated that less than 6 cases in which operation was carried out under 48 hours of age had been reported.

Twenty-three cases of diaphragmatic hernia in the newborn infant were treated at Childrens Hospital, Los Angeles, during a 15-year period, 1942 through 1957. The average age at the time of surgery was 4 days.[2]

In the report of Campanale and Rowland[1] although operation was performed early, at ages 45 minutes, 2 hours, 21 hours, respectively, all three patients died. Most of the larger reported series deal with somewhat older infants.

Bowers, McElin and Dorsey,[3] in 1955, reported 13 cases among 15,000 deliveries during a 10-year period, an incidence of 1 case of diaphragmatic hernia in approximately every 1,200 births.

Of the 13 cases reported by Moore, Battersby, Roggenkamp and Campbell, in 1957,[4] in which operation was performed at sometime during the first 90 hours of life, the youngest infant was 6 hours old; death occurred, however, one hour following operation.

Schaffer,[5] in his publication, "Diseases of the Newborn," discusses 3 cases of congenital diaphragmatic hernia treated surgically, the youngest infant being 24 hours old at the time of surgery.

According to Reed and Lang,[6] diaphragmatic hernia in infancy, as observed in the roentgen examination, falls into three groups. The largest group comprises those cases in which the defect is unilateral, involving the posterolateral muscular segment of the diaphragm (foramen of Bochdalek). The two smaller groups comprise those in which the esophageal hiatus is involved, and those with involvement of the anteromedial or tendinous segment of the diaphragm or septum transversum.

*Presented by Doctor Vega before the regular monthly meeting of the McDowell County Medical Society at the Stevens Clinic Hospital in Welch on January 11, 1961.

Submitted to the Publication Committee, April 13, 1961

The Authors

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Diagnosis

Posterolateral defects of the diaphragm are almost invariably associated with respiratory symptoms.[7] Cyanosis may be apparent immediately after birth. Expansion of the abdominal viscera within the chest results in a progressive decrease in aeration of the lung on the affected side and, later, in a mediastinal shift to the opposite side and compression of the contralateral lung.

Very occasionally, the presenting symptoms are those of partial or complete intestinal obstruction.

More rarely, the infant will have no significant symptoms early in life, the diagnosis in these children being made incidentally later on, via a routine chest roentgenogram.

In addition to rapid respiration and cyanosis, physical examination will reveal dextrocardia, absent breath sounds, bowel sounds over the chest, tympanitic percussion note in the chest, and absence of tympany in a scaphoid abdomen, which should lead one to suspect the presence of a diaphragmatic hernia. Full diagnosis depends upon roentgenographic examination of the chest.

Treatment

The treatment is surgical and operation should be done as soon as the diagnosis is made. Surgical reduction of the hernia and repair of the diaphragmatic defect have been accomplished by various approaches: the abdominal, the thoracic,

or the combined thoracoabdominal approach, according to the surgeon's choice. It appears, however, that the best approach is the abdominal. In favor of this is the fact that in approximately 20 per cent of cases, there is associated malrotation of the bowel which, through an abdominal incision, can be treated as soon as the diaphragmatic defect has been repaired.

The most frequent complication following repair of a diaphragmatic hernia is pneumothorax. Not uncommonly this is a tension pneumothorax. When this complication occurs, thoracotomy should be done immediately and a chest tube inserted and placed on gentle underwater seal suction.

Case Report

K. W. S., a white male infant, was born at Stevens Clinic Hospital on November 27, 1960, at 9:13 A. M., following application of outlet forceps. The birth weight was 6 pounds, 10 ounces. The baby cried spontaneously, but his skin was somewhat cyanotic. He appeared distressed and his respiration was slightly labored. This was the first pregnancy for his 33-year-old mother. Her prenatal course had been uneventful.

Examination revealed the baby to be well developed, well nourished and apparently in acute distress, with moderate peripheral cyanosis. His cry was good. Moro's reflex was normal. The ears, nose and throat were not remarkable. Examination of the chest revealed respiration regular but slightly rapid (60 per minute). There was no chest retraction. No breath sounds were heard on the left chest. Questionable minimal respiratory sounds were heard on the right lower base. The heart sounds although normal were displaced to the right hemithorax, being best heard on the right lateral thoracic wall.

Roentgenograms of the chest revealed a left diaphragmatic hernia (Figure 1).

Laboratory: 11/27/60 – RBC 6.00; WBC 18,600; hemoglobin 20+; segmented neutrophils 77; lymphocytes 18; eosinophils 5. 12/2/60: Bleeding time 49 seconds. Clotting time 3 minutes, 42 seconds.

The infant was operated upon at 7 hours of age. An abdominal incision was made under endotracheal anesthesia. A large posterolateral diaphragmatic hernia (foramen of Bochdalek) was found, with the small and large intestines in the left thoracic cavity. There was failure of rotation of the cecum. The stomach and descending colon remained in the abdomen. After placing the small and large intestines back into the abdominal cavity through the foramen of Bochdalek, the margins of the hernia were approximated with two layers of #000 silk. The abdominal wound was then closed without much difficulty.

An x-ray of the chest immediately after surgery revealed: Tension pneumothorax on the left with the mediastinum still displaced to the right.

A thoracotomy tube was inserted through the second anterior intercostal space in the midclavicular line and connected to an underwater drainage bottle. The infant tolerated the procedure well.

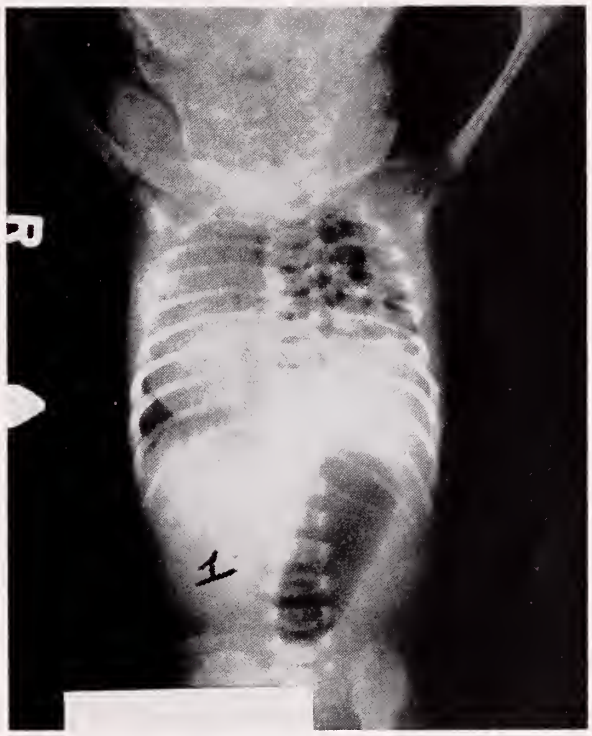

Figure 1: Roentgenogram of the chest and abdomen taken 30 minutes after birth shows a large portion of the small bowel within the upper most portion of the left hemithorax. The mediastinum is displaced toward the right. Compensatory emphysema involves a portion of the right lower lobe. The right upper lobe seems somewhat atelectatic. The cardiac silhouette is markedly displaced to the right. The stomach and liver lie within the abdominal cavity.

Following surgery the infant was started on intravenous fluids slowly, given 25,000 units of aqueous penicillin every 4 hours, and kept in oxygen in an incubator for the first 24 hours.

X-rays on 11/28/60 revealed the tension pneumothorax to have completely disappeared. The left lung was fully expanded; the mediastinum was midline and positioned; right lung was well aerated. The thoracotomy tube was removed that same day.

On the third day after surgery the infant was started on oral feedings which he tolerated well. His postoperative course was uneventful. He was discharged December 5, 1960.

Chest x-rays two days before leaving the hospital (12/3/60) revealed proper aeration of both lungs and normal cardiac and mediastinal shadows (Figure 2).

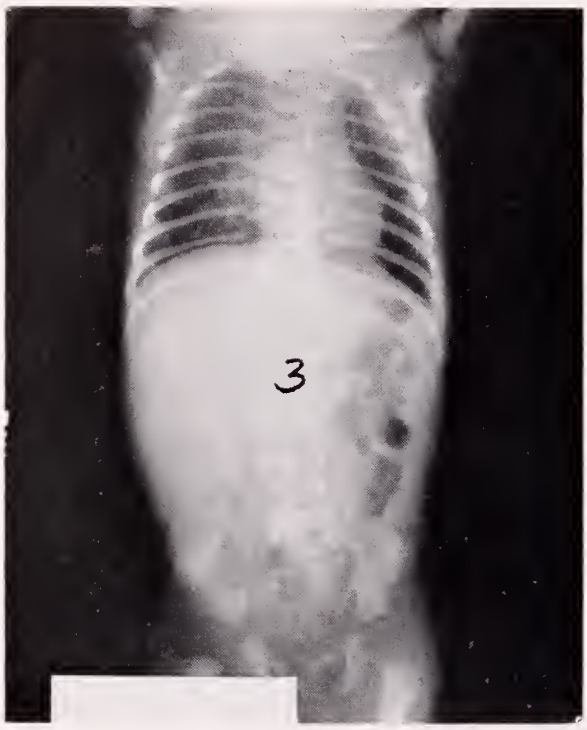

Figure 2: Film taken at age one week shows proper aeration of both lungs; normal cardiac and mediastinal shadows. All of the intestinal shadows are located within the abdominal cavity.

The infant was reexamined January 11, 1961, at which time his weight was 9 pounds, 7½ ounces. His condition was excellent. Examination was essentially negative. His abdominal incision was well healed.

Summary

A case of congenital posterolateral diaphragmatic hernia in a newborn in which the infant underwent surgery at age 7 hours is presented. Recovery was complete.

References

1. Campanale, R. P. & Rowland, R. H.: Hypoplasia of the Lung Associated With Congenital Diaphragmatic Hernia, Ann. Surg. 142:176-189, 1955.
2. Meeker, Jr., Irving, A., Nichols, M. D. & Norton, J.: Congenital Diaphragmatic Hernia in the Newborn, West. J. Surg. 67:42-47 (Jan.-Feb.) 1959.
3. Bowers, V. M., Jr., McElin, T. W. & Dorsey, J. M.: Diaphragmatic Hernia in the Newborn, Obst. & Gynec. 6:262, 1955.
4. Moore, T. C., Battersby, J. S., Roggenkamp, W. M. & Campbell, J. A.: Congenital Posterolateral Diaphragmatic Hernia in the Newborn, Surg., Gynec. & Obst. 104:675-689 (June) 1957.
5. Schaffer, A. J.: Diseases of the Newborn, Philadelphia, W. B. Saunders Co., 1960.
6. Reed, J. O. & Lang, E. F.: Diaphragmatic Hernia in Infancy, Am. J. Roentgenol., Rad. Therap. & Nuclear Med. 82:437-449 (Sept.) 1959.
7. Schuster, S. R.: The Recognition and Management of Diaphragmatic Hernia in Infancy and Childhood, Quart. Rev. Pediat. 15:171-175 (July-Sept.) 1960.

Maintaining Self-Respect and Dignity

In the recent Presidential election year the candidates for office vied with each other as to who could give away more of our natural resources, and they have even bartered away medical service for votes. There are now in America about fourteen million people over sixty-five years of age. This was found to be a bonanza for votes and these older people were promised among other benefits, free hospital and medical care.

The vast majority of these senior citizens have provided for their retirement years by exercising thrift and good management during their working years, by pensions, annuities, health insurance, such as Blue Cross and Blue Shield. They do not need and do not want handouts from the government. They wish to maintain their self-respect and dignity. Only a small percentage need help and this group is now adequately provided through existing agencies.

Medicine is a noble profession, a science and an art, developed through many years of study and practice. It has made greater strides in the past half-century than in all prior recorded history. It has increased longevity of man by about thirty years. It has conquered many dread diseases and it is now on the threshold of yet greater discoveries. All this was attained through private enterprise without government interference.—Samuel Adelson, M. D., in the Rhode Island Medical Journal.

Special Article

Cabell County Urine Screening Project*

M. G. Stemmermann, M. D.

During the past few years, search for specific causes of mental retardation has been intensified by the development of urine "screening" methods and by the application of paper chromatography to the isolation of inborn metabolic errors. Folling's familiar ferric chloride test has been widely used to detect phenylketonuria, the commonest metabolic cause of retardation, occurring in the United States about once in every 20,000 births.[1] Approximately twenty other familial disorders associated with mental retardation require more elaborate testing procedures.

The present study was designed to determine the incidence of phenylketonuria among the school children of Cabell County, also whether or not the Ghadami screening test for amino-aciduria[2] is a useful means of detecting other familial metabolic errors.

Method

Morning urine specimens, identified by school and file numbers, were obtained from 233 children enrolled in the special education classes: trainable center, 24; educable classes, 156; physically handicapped, with and without retardation, 42; pre-school and "pseudoretarded", 11. In the physically handicapped group, visual and auditory handicaps and a variety of neurological conditions were included.

The screening test for amino-aciduria was carried out according to Doctor Ghadami's directions. At his suggestion migration of the solvent (acetic acid, water and ethanol) was obtained by a twist of filter paper rather than by his original method of employing a pyridine wick. In our experience, full development of color (after staining with ninhydrin) was best obtained by placing the chromatogram in an incubator set at 98.6 F. for one hour. Results, with the time and heat factors thus standardized, were regularly reproducible. Urine was tested in groups of four, consisting of three unknowns and one normal control. On retesting of positive or "doubtful" specimens, a known phenylketonuric urine and a normal control were included in each group. Testing each group of four required approximately two hours. A period of only ten minutes was needed for "spotting" the urines and recording results but the migration of solvent and development of color required at least ninety minutes.

*Project in cooperation with the Cabell County Board of Education, supported by the Owen Clinic Institute and, in part, by the Cabell-Huntington Mental Health Association. Mr. Robert Ellis, former Mayor of Huntington, provided specimen containers. The Ames Company donated 100 Phenistix.

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Volunteer Workers

Initial screening for phenylketones, glucose, galactose and sucrose was accomplished by volunteers from the Cabell County Council for Retarded Children. Each had had a one-hour training session. Positive or "doubtful" tests were checked by the laboratory staff. A certain amount of each specimen was frozen for additional studies; the remainder was left in the sunlight for forty-eight hours and color changes noted. Fresh specimens were obtained when any of the above named tests were found to be positive or "doubtful."

Since specimens were identified by number only, school authorities were notified when one was found definitely to be positive on retesting. When a family physician was known, he was informed of positive results. Otherwise the school psychologist or teacher informed the family and explained the need for further study.

Results

Results of the total testing program may be seen in Table 1. Eighteen children, or 7.7 per cent, were found to have metabolic errors causative of or contributing to the retardation or physical handicap. This is a lower figure than that shown in Table 1 since several specimens were positive in more than one test. There were no instances of galactosuria nor of sucrosuria.

Caliber of Volunteers' Work

The work of the volunteers compared favorably with that of the trained laboratory staff. The three urines (1.3 per cent) positive for phenylketonuria were detected by volunteers and have been confirmed. Volunteers tended to read as "doubtful sugar" many specimens that were retested and found to be negative. There were no false positive tests for phenylketones. False negative tests would not be disclosed under the design of the present study.

Of the 156 educable children, 6 per cent (4 per cent of the total group) have metabolic defects, which suggests that severe retardation is not an invariable complication. Among those with higher I. Q's. are a diabetic child and one with probable acute intermittent porphyria, in both cases the retardation being coincidental to the metabolic defect. On the other hand, all three phenylketonuric children are severely retarded, with I. Q.'s. of 38, 36 and 46 respectively.

In Table 2 those urines showing amino-aciduria are listed according to amino-acid pattern. Six children still are under study or, because of change in addresses, have been "lost." By "false positive" is meant a "doubtful" or positive test followed by a negative test on a fresh specimen. In three of these the initial positive test apparently was due to treatment with steroid hormones. In the remainder nutritional factors and intercurrent infections apparently were responsible. Since muscular wasting is commonly associated with generalized amino-aciduria, the relatively large number of physically handicapped in this category is understandable.

Of particular interest are the two children, sisters, with argininosuccinicaciduria (Allan-Dent disease). Unlike the original cases first described in 1958,[3] in which the children were severely retarded, our children have I. Q.'s. of 45 and 69. The scholastic achievements of the older child with the lower I. Q. have been much greater than her scores predicted.

Table 1

Results of General Urine Screening

Class	No.	Glucosuria Pos.	Glucosuria Trace	Phenylketonuria	Amino-aciduria Pos.	Amino-aciduria Doubtful	Color Change
Trainable	24	0	0	3	4	0	0
Educable	156	1	4	0	8	5	1
Physically handicapped	42	0	1	0	4	4	0
Pre-school and others	11	0	0	0	0	0	0
Total	233	1	5	3	16	9	1
		(0.43%)	(1.3%)	(6.9%)	(0.43%)		

Table 2

Amino-Aciduria According To Amino Acid Pattern

CLASS	SINGLE AMINO-ACIDURIA	GENERAL AMINO-ACIDURIA	UNDETERMINED	"FALSE POSITIVE"
Trainable	Phenylketonuria 3	1	0	0
Educable	Argininosuccinicaciduria 2	1	6	5
Physically handicapped	0	4	0	3
Total	5	6	6	8

Discussion

The incidence of phenylketonuria among the school children in Cabell County is approximately the same as that estimated by Jervis[4] to be in mental institutions. It is higher than that recently reported from the school survey in California (2.2 per 1,000).[5] Since the disorder has not been reported in Jews, Negroes nor Asiatics, the higher incidence of these racial groups, especially Asiatics, may account for the lower incidence of phenylketonuria in California as compared with that in West Virginia. The smaller number of children tested in Cabell County also may be a factor.

Of importance to other communities is the question, "Does a urine screening project for retardates yield sufficient new information to warrant the effort and expense entailed?" Follow-up studies of the eighteen children with positive tests revealed that only three previously had been identified. The diabetic child had been under medical supervision for several years. One of the phenylketonuric children, now eight years of age, was first identified at the age of five. One child with generalized amino-aciduria had been identified as "infantile hypoglycemia" in early childhood.

Two of the phenylketonuric children, ages nine and thirteen, had been undetected previously. The child whose urine showed darkening on standing still is being studied but this probably is a case of acute intermittent porphyria. She is now fourteen years of age and has been treated for numerous respiratory infections, unexplained attacks of nausea and vomiting, intermittent flaccid paralysis of one leg and annual psychotic episodes, usually lasting about one month. That the porphyria was undetected is understandable in view of the intermittent character of the disorder, and the fortuitous fact that the school urine collection coincided with the onset of her

most recent attack. A Watson test for porphobilinogen on four specimens yielded one positive and one "doubtful" during the attack and two negative tests since recovery.

Those children with "doubtful" tests should be re-checked frequently. It is possible that the five with faintly positive glucosuria are potential diabetics. It is of interest, however, that these five also had "doubtful" tests for amino-aciduria, which suggests that a renal factor may be responsible for both conditions.

Had we limited the survey to screening for phenylketonuria and reducing substances, we would have concluded that familial metabolic diseases are indeed rare causes of mental retardation. Considered singly this undoubtedly is true but together they probably constitute a larger group than has been suspected.

A simple screening test for amino-aciduria such as that developed by Ghadami is a real contribution, since detection of metabolic errors previously has depended upon the availability of a skilled chemist. When a screening test is positive, further work, of course, must be done to determine if the positive results are due to a generalized or a patterned amino-aciduria. Through the good offices of the National Institute of Neurological Diseases and Blindness, we have obtained the services of research biochemists in Ohio.

Study of the retarded child certainly should include screening for amino-aciduria and the Ghadami technique is sufficiently simple for use in any community hospital laboratory or even in the physician's office. While we cannot know how many "false negatives" there were, it probably is a negligible number, in view of the eight 3.4 per cent "false positives." It is hoped that during the next school year the problem both of "false negatives" and "false positives" can be explored.

For most of the metabolic defects uncovered by the study, no treatment is available if the child already has reached school age. By detecting conditions in which a genetic factor is involved, however, families can be alerted and encouraged to have younger and, as yet, unborn siblings tested. Treatment is presently available for galactosuria, phenylketonuria and infantile hypoglycemia, and if instituted early in life, mental retardation can be prevented or at least ameliorated. By school age the best that can be hoped for is control of seizures, when present. BAL may be helpful in Wilson's disease in older children.[6]

It was hoped that this project would serve as a method of public education. In addition to the 233 children tested, and their families, eighteen teachers and eleven volunteer workers now know somthing about inborn metabolic errors in general, and phenylketonuria in particular.

Summary

1. In cooperation with the Board of Education a urine screening project for retarded school children was carried out in Cabell County for the detection of inborn metabolic errors.

2. The incidence of phenylketonuria among 233 children tested was 1.3 per cent. No case of galactosuria nor of sucrosuria was found. One previously identified diabetic child and one with probable acute intermittent porphyria also were detected.

3. The Ghadami screening test for amino-aciduria is a simple and useful procedure. By this method we were able to uncover two cases of argininosuccinicaciduria (Allan-Dent disease) and six of generalized amino-aciduria.

4. The value and limitations of urine screening tests for school age children are discussed and the role of the volunteer worker evaluated.

Acknowledgment

We are indebted to Helen K. Berry, Children's Hospital Research Foundation, University of Cincinnati, Cincinnati, Ohio, for determinations of phenylalanine and its derivatives in the blood and urine of the three phenylketonuric children, and to Marvin D. Armstrong, Fels Foundation for Human Development, Yellow Springs, Ohio, for differentiation between patterned and generalized amino-aciduria.

References

1. Armstrong, M. D. & Low, N. L.: Phenylketonuria. VIII. Relation Between Age, Serum Phenylalanine Level and Phenylpyruvic Acid Excretion, Proc. Soc. Exper. Biol. & Med. 94:142-146, 1957.
2. Ghadami, H. & Schwachman, H.: A Screening Test for Amino-Aciduria, New England J. Med. 261:998, 1959.
3. Allan, J. D., Cusworth, D. C., Dent, C. E. & Wilson, V. K.: Disease, Probably Hereditary, Characterized by Severe Mental Deficiency and Constant Gross Abnormality of Amino-Acid Metabolism, Lancet 1:182, 1958.
4. Jervis, G. A.: Phenylpyruvic Oligophrenia, A. M. A. Arch. Neurol. & Psychiat. 38:944, 1937.
5. Henderson, R. A. & Centerwall, W. R.: The Attack on Phenylketonuria: A Pilot Study. Except. Child. 27:260, 1961.
6. Denny-Brown, D. & Porter, H.: Effect of BAL on Hepatolenticular Degeneration (Wilson's Disease), New England J. Med. 245:917, 1951.

The President's Page

Changing Times

Civilization does not remain static, but changes constantly. This is one of the most difficult things in life to accept because all of us prefer a familiar pattern in our plan of living. When these changes are gradual we can adjust to them by minor variations in our daily routine. When change is more abrupt we are confronted with some uncertainty. I am sure it is an awareness of change in our time honored physician-patient relationship that troubles doctors today. It is well that it should. We are becoming increasingly cognizant that while we have been perfecting ourselves as scientists, strong forces are shaping our environment and are ready to change our lives.

The prolongation of life as a result of increased medical knowledge has, in itself, created sociological problems which confront us today. Complete care of ever increasing millions living long past an arbitrary sixty-two or sixty-five years of age could well be a burden even our rich country might find difficult to bear.

Most of our healthy older citizens would be far happier if they could continue productive lives long past the age when many are literally forced to retire by governmental regulations and other work rules of union and management. These regulations were not made with the present life span in mind. As physicians we have often watched the rapid deterioration of those forced to retire. Incentives to encourage useful latter years, rather than legislation to foster idleness, would be beneficial to all segments of our population and to our nation as a whole.

In recent years there has been developing an ever increasing dependence on the federal government for our protection and security. If carried too far, this change in the ideology of many of our fellow Americans could be a disease more difficult to treat than many we encounter in medical practice. It could destroy initiative and pride in work well done. I do not mean to condemn as socialistic all changes in methods of practice. It is inevitable that adjustments will occur in an ever changing society. Many have been needed and have provided better medical coverage for our expanding population. However, it is our duty and responsibility to see that such changes are in the best interest of our patients and not just another increase in a growing bureaucracy.

With improved transportation there has been a tendency over the years toward greater attendance at sectional and specialty meetings. This is good, but with less need for the County Society as a means of spreading medical knowledge, much of its former effectiveness has been lost. Open discussion of the problems facing medical practice today with our friends and colleagues is often lacking or too infrequent. It is in the County Society that policy relative to medical practice should be initiated. Policies, so conceived, should be made known to district Councillors. Delegates to our Annual State Meetings should receive instructions from those they represent. In this way each member can feel that he is truly represented both on a State and National level.

Attendance at our Annual State Meetings and that of the American Medical Association offers an opportunity to attend committee discussions and hearings so that the proceedings of the legislative body, the House of Delegates, may be better understood. In addition, informal conversation with physicians from other communities will help focus attention on our common problems.

It is with great humility that I become the ninety-fifth President of the West Virginia State Medical Association. After serving three and a half years on the Council and two years as an officer, I am only beginning to grasp the magnitude of the many complex problems that are confronting us as physicians. To solve these problems it will not be enough that officers, councillors, committeemen, and delegates perform their duties diligently. There must also be the desire of every member of our organization to contribute his share of time and ideas.

All of us will sorely miss the advice and counsel of Mr. Charles Lively during the coming year. His long and diligent service in our cause has earned him praise beyond any that I could give him here. We are indeed fortunate in still having his son Bill with us to carry on the traditions.

D. E. Greeneltch, M. D., President

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EDITORIALS

WELCOME, BILL

We were very pleased when Dr. J. C. Huffman, Chairman of the Council of the West Virginia State Medical Association, announced that William H. Lively, worthy son of a worthy sire, had been chosen Executive Secretary to succeed his late father Charles Lively, who served medicine in West Virginia so long and so well. Bill will also serve as Managing Editor and Business Manager of *The West Virginia Medical Journal*, a position for which he is especially fitted inasmuch as he holds a master's degree in journalism from Columbia University.

William H. Lively

While a native Floridian, practically all Bill's life has been spent in West Virginia. He grew up in Charleston, went through grade and high schools there and holds a baccalaureate degree from West Virginia University. For the past six years he has been Executive Assistant to his father, has done an excellent job, and knows from actual experience every facet of the work entrusted to him by the Council. Our association with him on *The Journal* has been not only very pleasant but very profitable; in fact he has been an excellent crutch for a greenhorn editor.

Thrice welcome, Bill.

OUR FOURTH-YEAR MEDICAL STUDENTS

On September 18, sixteen fourth-year medical students will matriculate at West Virginia University. Actually the fourth year in medicine now consists of four academic quarters, therefore, the present fourth-year class has been attending school all summer. The academic quarters are divided as follows: summer quarter began June 19 and ends September 9; autumn quarter begins September 18 and ends December 16; the winter quarter begins January 3, 1962 and ends March 17; the spring quarter begins March 26 and ends June 2. Commencement Day will be on June 4, 1962.

This so-called "quarterly system" has distinct merit, since it allows a great amount of flexibility in the clinical years, which obviously is highly desirable.

The fourth-year students will spend at least three-fourths of the year, that is, three academic quarters at the University Medical Center. For three months (or one academic quarter) they will be expected to further their education at the Medical Center or at another authorized institution. The student, for example, will be allowed

to take intensive work in one of the basic sciences, such as, physiology or biochemistry; or he may choose to work in some concentrated field of medicine or surgery. During this academic quarter he should be able to spend considerable time in the library, or perhaps engage in research in some department, or may even write a term paper. Whatever he does, this experience should enable him to enrich his medical education.

The work in the clinical years has been integrated so that the program is a continuous rather than a divided experience. This program actually is now in effect and assures the student a logical sequence of clinical experience. It is so arranged, furthermore, that it permits the student to assume increasing responsibilities as his knowledge and skills develop.

The out-patient clinic experience has been organized so each student can spend six continuous months there. At this time he will see new patients who have not been "pre-screened." That is, the fourth-year student takes the initial history and does a physical examination on patients as they present themselves. He does not know what sex his next patient will be, or whether the case will be medical, surgical or obstetrical. The student's initial "work-up" of the case is checked by the appropriate specialist from the faculty, after which the student follows the patient through any necessary referrals to specialty clinics. In essence, the student functions as the family physician of the patient while he is in the clinical situation. It is believed this will provide an unusual learning opportunity for the student.

NORMAN HAYHURST JOLLIFFE, M. D.

Norman Hayhurst Jolliffe, M. D., an internationally known student of nutrition, died in New York City on August 1, 1961 of diabetes. He was born August 18, 1901 at Knob Fork, West Virginia. He was a graduate of West Virginia University in 1923, and after completing his first two years of medicine, served as an assistant in the department of physiology at his alma mater. He completed his work at New York University-Bellevue Medical School in 1926, and interned at Bellevue Hospital in New York City.

Doctor Jolliffe held several teaching posts. He served as instructor in physiology at New York University-Bellevue Medical School and later became associate professor of medicine. In 1945 he held the position of associate professor of nutrition at the Columbia University School of Public Health. He was made director of the Bureau of Nutrition of New York City Department of Health in 1949, and in 1959 opened the first nutrition clinic in the department.

He was a prolific writer and contributed many articles on nutrition to current periodicals. His book, "Reduce and Stay Reduced" was widely read, as was his "The Reducing Diet Guide." He was co-author of "Clinical Nutrition," which was widely used as a textbook. He was president of the National Vitamin Foundation, 1952-1954.

His outstanding ability, and his wide knowledge of nutrition gained him international recognition. He traveled extensively in foreign lands making surveys and consulting on problems in connection with nutrition. In recent years he visited Brazil, Formosa, Cuba, Newfoundland and Italy. He was given the Findlay Award for his meritorious work in Cuba. In spite of his physical handicap, especially the past few years, he carried on with high resolve.

Doctor Jolliffe was endowed with a brilliant and imaginative mind. He was dignified, but had the common touch. People liked him instinctively, and he had the happy faculty of making lasting friendships. He was a loyal West Virginian and was intensely interested in the development of the West Virginia University Medical Center.

The world has lost not only a dedicated scientist but a fine person. West Virginia can be justly proud to have nurtured and given to the world such an outstanding figure. Norman Jolliffe left the world a better place in which to live.

OSCULATORY DANGERS

We always get a kick out of the editorials in *The Journal of the Medical Society of New Jersey*, and that is especially true of one in the July issue entitled "When a Body Kiss a Body," despite the fact that Burns actually wrote "if" instead of "when."

The scientific core of the article is a discussion of the probability that infectious mononucleosis is transmissible by kissing but the pleasantry is rare indeed, and not only entertaining but indeed informative. We quote it entirely:

> North Jersey doctors will remember Charles Craster, Newark's long-term Health Officer and his anti-baby-kissing campaign. He distributed bibs which said: "Don't Kiss Me"; or "Kissing Transmits Germs." The campaign aroused much merriment and some indignation from those who felt that being opposed to kissing was Anti-American since, after all, kissing is part of the romantic tradition of America. It could stand anything but ridicule. As

Zagury[1] said: "Some women blush when kissed; some call for the cops; some swoon and some swear; but the worst are those who laugh." And Holmes[2] remarked with more truth than poetry that "The sound of a kiss is not so loud as that of a cannon; but its echo lasts much longer."

Kissing is supposed to be harmless and people like Charles Craster were considered kill-joys. As Robert Burns[3] (the poet, not the cigar) said: "When a body kiss a body, need a body cry?" It seems the answer might be 'yes.' This unchivalrous attack on one of America's favorite sports was launched in, of all places, the medical magazine *GP*. Here Evans[4] reported that kissing can and does transmit infectious mononucleosis. The incubation period (for the curious, the science-minded or the just plain suspicious) is 32 to 50 days. The first cynic, it seems was Hoagland[5] who did medical (and social) histories on 75 West Point cadets with infectious mononucleosis. He found that 71 of them had kissed a girl within 7 weeks before the first symptom. (The other four, we understand, were referred to the psychology laboratory for lie detector tests and to the physiologic laboratory for endocrine studies).

Evans[4] made a study at the University of Wisconsin where he is (or before he published the paper *was*) Professor of Preventive Medicine. He found that 78 per cent of the victims reported osculatory contacts within the incubation period. The controls, on the other hand (virile Wisconsin students who were in this hospital for other disorders) reported such "intimate oral activities" on a much smaller scale—only 48 per cent had a history of bussing[6] and the statisticians figured that in this case the difference between 78 and 48 per cent was significant.[7] The conclusions seem to be (a) Infectious mononucleosis is an occupational hazard of college students; (b) It also serves as a rough and ready lie detector test; (c) It is, in a way, a social disease, but one which carries no social censure.

The only safe kissing, if one wants to be strictly sanitary, would be to follow the Austrian practice. *Kuss die Hand, gnadige Frau.*

The only omission which might have added zest is the anatomist's definition of a kiss:

"The juxtaposition of two orbicularis oris muscles with the intervention of mucous membrane supplied by the fifth and seventh nerves."

Thank you, Brother Davidson.

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1. Zagury, Joseph: *Osculatio Ferminarum*, Bologna, 1961.
2. Oliver, not Sherlock Holmes: (Oliver Wendell Holmes in "The Professor at the Breakfast Table").
3. Burns, Robert: "Coming Through The Rye!" (a poem and a song).
4. Evans, Alfred S.: *GP*, February 1961.
5. Hoagland, A. J.: American Journal of The Medical Sciences, 229:262 (Feb. 1955).
6. According to our dictionary, "A buss is a rude or playful kiss." The dictionary further clarifies by quoting the following couplet from Robert Herrick. "Kissing and bussing differ both in this: we buss our wantons, but our wives, we kiss." This Robert Herrick (1591-1674) must have been quite a character. He is responsible for such phrases as "Gather ye rosebuds while ye may" and "Blest is the Bride on Whom the Sun Shines." He was a bachelor, and according to the *Encyclopaedia Britannica* "he lived at a vicarage surrounded by a family of pets, tended by a servant whose first name was Prudence." When the Puritans came to power, they ejected Herrick from his vicarage.
7. If you don't believe that this is statistically significant let us explain that the goodness of fit is good, the chi square is 10.2 the coefficient of correlation is plus five, the standard error is improbable, and the Poisson exponential variant is a non-central random. Any more argument? (We don't know what this means, either).

PLANNING FOR CIVIL DEFENSE

It has been a source of regret to us to note the sluggishness with which the populace generally has responded to the call for organization to prepare for civil defense generally. With the threatening war clouds presently lowering on the world horizon, it behooves all segments of citizenry to prepare for civil disaster, especially schools and hospitals.

The life-saving value of group organization and advance planning in coping with civil disaster is vividly illustrated by a news story and editorial appearing in the July issue of *Group Practice*, official organ of the American Association of Medical Clinics.

Last Groundhog Day, on a bitterly cold evening, fire struck the Lutheran Hospital at LaCrosse, Wisconsin, staffed by members of the Gundersen Clinic. In less than 15 minutes, doctors, nurses and hospital workers, operating on a pre-arranged and well rehearsed plan, evacuated 121 patients from the hospital, without injury or panic.

In a matter of minutes, the fire, starting in a cupboard on the first floor, had shot up between the walls and broken through the roof.

Under the disaster plan, a coded gong was flashed by a practical nurse to the switchboard operator, who notified the city fire department. Then all hospital personnel were alerted, gas and oxygen mains were shut off and patient evacuation began at once.

The experience revealed a few flaws in advance planning. The hospital switchboard was hampered in making outgoing calls because of the rush of incoming calls. In a future emergency, the telephone company may block incoming calls. Also the fire, occurring in the center of the hospital, isolated the outer wings from each other, so that two separate disaster programs had to operate simultaneously. Emergency intercom facilities will be available hereafter.

Group Practice comments editorially: "It seems not unlikely that as time goes on more and more clinics and clinic physicians will have to prepare themselves efficiently for possible disaster in their communities."

Serious Professional Losses

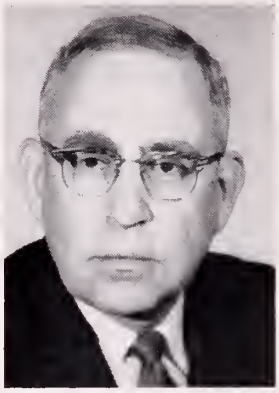
The glamour of the medical profession and the reputation of the physician have suffered during the past two decades. One of the most serious side reactions of this loss of prestige has been its adverse influence on the scientific-minded young men and women. Our population has increased; yet the number of applicants to medical schools has decreased.—Illinois Medical Journal.

GENERAL NEWS

14th Annual Rural Health Conference At Jackson's Mill, Oct. 5

"Our Responsibilities in Rural Health" will be the theme of the 14th Annual Rural Health Conference which will be held at Jackson's Mill on Thursday, October 5. More than 250 persons are expected to attend the one-day meeting.

Kenneth E. Penrod, Ph. D.



Clark K. Sleeth, M. D.

The conference is sponsored annually by the West Virginia State Medical Association in cooperation with the Agricultural Extension Division of West Virginia University, the West Virginia Home Demonstration Council, the State Department of Health, the West Virginia Farm Bureau, and the West Virginia Congress of Agriculture.

Dr. Charles E. Staats of Charleston, who is in charge of the program for this year's conference, will call the meeting to order in the Assembly Hall promptly at 10:00 A. M. The invocation will be given by Rev. Henry Austin, Pastor of the First Baptist Church of Buckhannon.

Keynote Address by Dr. Kenneth E. Penrod

Following opening remarks by Doctor Staats, the keynote address will be delivered by Dr. Kenneth E. Penrod of Morgantown, Vice President, West Virginia University Medical Center. His subject will be "How the West Virginia University Medical Center is Contributing to Better Rural Health in West Virginia."

Panel Discussion

Doctor Staats announced that the remainder of the morning session will be devoted to a panel discussion on the subject, "Individual and Group Responsibilities in Rural Health."

Dr. Clark K. Sleeth of Morgantown, Dean of the West Virginia University School of Medicine, will serve as moderator. There will be a question and answer period, with full audience participation, following the remarks of the participants.

Members of the panel will be as follows:

Dr. Dorothy Mae Major of Morgantown, Dean, West Virginia University School of Nursing.

Mr. Paul Nay of Jane Lew, President of the West Virginia Farm Bureau.

Mr. Miles C. Stanley of Charleston, President of the West Virginia Labor Federation, AFL-CIO.

Rev. Henry Austin, Pastor of the First Baptist Church in Buckhannon.

Mr. Jim Comstock of Richwood, Editor of the *Hillbilly*.

Luncheon in Mount Vernon Dining Hall

Luncheon will be served in the Mount Vernon Dining Hall at 12:15 P. M., with the West Virginia State Medical Association as host.

Afternoon Session

Dr. D. E. Greeneltch of Wheeling, President of the West Virginia State Medical Association, will deliver the address of welcome at the opening of the afternoon session which will begin at 1:15 o'clock.

Following his address, the afternoon session will be devoted to practical demonstrations in the prevention and treatment of accidental injuries.

The conference is open to members of all interested groups, and a formal invitation to attend the one-day meeting is being extended to members of local farm bureaus, home demonstration councils, agricultural extension workers, and personnel of local health departments.

Advisory Committee

The program for the conference was planned by members of the Advisory Committee to the State Medical Association's Rural Health Committee.

In addition to Doctor Staats, the other members are Miss Gertrude Humphreys of Morgantown, State Leader, Home Demonstration Work, WVU Extension Service; Mrs. W. N. Phillips of Wallace, Secretary of the West Virginia Home Demonstration Council; Dr. N. H. Dyer, State Director of Health; and Mr. Gordon L. Leckie, formerly associated with the West Virginia Farm Bureau and now a graduate student at West Virginia University.

Convention Story Will Appear In October Journal

The 94th Annual Meeting of the West Virginia State Medical Association is being held at The Greenbrier in White Sulphur Springs as this issue of *The Journal* goes to press.

The full convention story, including information concerning new officers of both the State Medical Association and Auxiliary, as well as heads of sections and affiliated societies and associations, will be carried in the October issue.

Congress on Medical Quackery In Washington, Oct. 6-7

The first National Congress on Medical Quackery, which will be held in Washington, D. C., October 6-7, was conceived by the American Medical Association's Department of Investigation.

Recognizing that medical quacks and charlatans thrive in the dark shadows of public ignorance, the Department felt the meeting would be an effective way of throwing the spotlight on this problem.

The National Congress will be co-sponsored by the Food and Drug Administration, which quickly accepted an invitation by the American Medical Association to join in the venture.

Taking part in the program will be officials from federal agencies and the AMA; representatives of national voluntary organizations involved in, or interested in, the health field; and members of law enforcement agencies.

National Blue Shield Conference In Chicago, October 23-24

Dr. Leonard W. Larson, President of the American Medical Association, will be among the featured speakers at the annual program conference of the National Association of Blue Shield Plans which will be held at the Drake Hotel in Chicago, October 23-24.

More than 400 delegates, including state and local medical society officers and secretaries, as well as physician-trustees and executives of Blue Shield Plans, will be in attendance to hear Doctor Larson speak on the subject, "Securing the Traditions of American Medicine."

The theme for the two-day meeting is "New Dimensions for Progress," and the conference discussions are specifically aimed at explaining and evaluating the basic requirements to be met in promoting the development and growth of Blue Shield to conform to the broadest range of public and professional needs and interests.

Among the topics to be discussed are: "The Economic and Social Aspects of Medicine Today," "Voluntary Health Care Programs Today-An Appraisal of Accomplishments and Opportunities for Growth," and "Developing New Opportunities for Growth and Progress in Blue Shield Locally and Nationally."

Epilepsy Conference in Texas

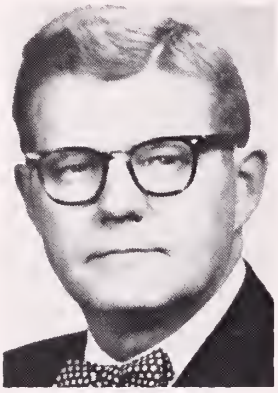
The Annual Conference of the Western Institute on Epilepsy will be held at the Granada Hotel in San Antonio, Texas, October 11-14.

Information concerning the meeting may be obtained by writing Dr. Lewis M. Helfer, 101 N. McCullough, San Antonio 12, Texas.

The Advisory Committee to the West Virginia State Medical Association's Rural Health Committee met recently to complete plans for the 14th Annual Rural Health Conference at Jackson's Mill on October 5. Left to right, Dr. Charles E. Staats of Charleston, chairman; Dr. N. H. Dyer, State Director of Health; Miss Gertrude Humphreys of Morgantown; Mrs. W. N. Phillips of Wallace; and Gordon L. Leckie of Morgantown.

W. Va. Heart Association Schedules Annual Meeting in Morgantown

The annual meeting of the West Virginia Heart Association will be held at the West Virginia University Medical Center in Morgantown on Friday, September 15. Dr. A. C. Woofter of Parkersburg, the president, has extended a cordial invitation to all physicians practicing in West Virginia to attend the meeting.



Herbert E. Warden, M. D.

Guests are invited to attend a luncheon in the Medical Center Cafeteria at one o'clock. Doctor Woofter will preside at the scientific session which will get under way at 2 o'clock. A special tour of the research facilities at the Medical Center has been arranged for all participants immediately following the scientific program.

"Newer Diagnostic and Treatment Measures for Intracardiac Lesions" will be the theme of the scientific program which will be presented by members of the faculty of the West Virginia University School of Medicine. The speakers and their subjects are as follows:

Russell V. Lucas, M. D., Instructor in Pediatrics and Pediatric Cardiologist, University Hospital. Subject: "Diagnostic Techniques of Angiocardiography."

Robert J. Marshall, M. D., Associate Professor of Medicine and Cardiologist, University Hospital. Subject: "Diagnostic Techniques for Cardiac Catheterization."

Herbert E. Warden, M. D., Associate Professor of Surgery. Subject: "Surgical Treatment of Intracardiac Lesions."

Following the formal presentation of papers, Drs. Lucas, Marshall and Warden will participate in a panel discussion.

A social hour and banquet will be held at the Morgantown Country Club on Friday evening. Physicians and their wives attending the meeting are also invited to attend the West Virginia University—University of Richmond football game on Saturday afternoon, September 16.

Further information concerning the program may be obtained by writing the West Virginia Heart Association, 1906 Washington Street, E., Charleston, West Virginia.

In addition to Doctor Woofter, the other officers of the Association are as follows:

Dr. Morris H. O'Dell of Charleston, president elect; Dr. Seigle W. Parks of Fairmont, vice president; Mrs. Laurence Meharg of Wheeling, secretary; and Mr. R. E. Plott of Charleston, treasurer. The executive director is Robert M. Simons of Charleston.

AMA Conference on Mental Health In Chicago, Sept. 29-Oct. 1

American physicians are preparing this fall to move into the forefront of a concerted campaign against mental illness and for better mental health for all. As an opening step in the campaign, a preliminary planning conference will be held in Chicago, September 29-October 1, to begin work on a specific program.

Some 150 key individuals interested in and knowledgeable in specific areas concerned with mental health and mental illness will attend the conference. There will be no representation from organizations as such.

The objectives of the conference are to assess the current state of activities in mental health, to bring into focus the problems and to consider procedures for the effective prevention and management of mental disorders.

The conference will seek to identify areas and methods in which physicians and the AMA can provide additional support to catalyze the development of programs for community and hospital services, research, and in professional and lay education.

The program which will be developed will then be presented to mental health representatives of state medical associations for their consideration and discussion. This group is tentatively scheduled to meet in January or early February.

One of the first major activities of the new mental health campaign will be to hold the First American Medical Association Congress on Mental Health, to be held in cooperation with the American Psychiatric Association. The congress is tentatively scheduled for June, 1962, in Chicago. Through the congress, the AMA will provide a forum to which both individuals and representatives of agencies and organizations interested in any of the aspects of mental health will be invited.

Dr. Leo H. Bartemeier of Baltimore is chairman of the AMA Council on Mental Health. Dr. M. Ralph Kaufman of New York City is chairman of the planning committee.

AAMA Meeting in Reno, Oct. 13-15

The fifth annual meeting of the American Association of Medical Assistants will be held at the Holiday Hotel in Reno, Nevada, October 13-15. More than 1,000 medical assistants are expected to attend the three-day meeting.

New wonder drugs, medical quackery, future training programs and professional liability are among subjects to be considered by representatives from throughout the country.

Dr. Leonard W. Larson, President of the American Medical Association, will be among the guest speakers. Another speaker will be Dr. Wesley W. Hall of Reno, a member of the AMA Board of Trustees.

During the meeting a charter will be presented to a new state chapter in Maryland, bringing the number of state medical assistants groups affiliated with AAMA to 29, with a total membership of more than 9,500 women.

New Executive Director Named By W. Va. Heart Assn.

Robert M. Simons of Charleston has been named executive director of the West Virginia Heart Association. He assumed his duties on August 15 following announcement of his appointment by Dr. A. C. Woofter of Parkersburg, the president.

He succeeds Frederick W. Kelley, who has accepted a position as assistant executive director of the North Carolina Tuberculosis Association.

Mr. Simons is a native of Buckhannon and was graduated from West Virginia Wesleyan. He received a master of public health degree from the University of Michigan in 1958.

He served as sanitarian for the Clarksburg-Harrison County Health Department, 1953-57, and was engaged in public health work in Florida for several months before joining the West Virginia State Department of Health as director of the Bureau of Public Health Education.

Since March, Mr. Simons has been receiving specialized training in New York, Baltimore, North Carolina and South Carolina with the American Heart Association in preparation for his duties with the West Virginia Heart Association.

Medical College of Georgia Schedules PG Courses

Five postgraduate programs sponsored by the Department of Continuing Education will be held during the fall and winter months at the Medical College of Georgia. Prominent physicians throughout the country will participate as members of the guest faculty.

The courses are as follows: "Advances in Pediatric Diagnosis and Treatment," October 31-November 2; "Fractures in General Practice," November 14-16; "Obstetric Problems in Private Practice," January 23-25; "Cardiac Emergencies," February 13-15; and "Pre- and Post-operative Care," March 20-22.

Each course is acceptable for 18 hours of credit by the American Academy of General Practice and the registration fee is $50 for each session. Further information may be obtained by writing Dr. Claude-Starr Wright, Director, Department of Continuing Education, Medical College of Georgia, Augusta, Georgia.

Thoracic Society Meeting in Miami Beach

The 57th Annual Meeting of the American Thoracic Society will be held in Miami Beach, Florida, May 20-23, 1962. The meeting will be held in conjunction with that of the National Tuberculosis Association.

The Society invites submission of abstracts of papers relating to the general field of tuberculosis and other respiratory diseases. Abstracts must be in the hands of the Program Committee not later than January 5.

Further information concerning the submission of abstracts may be obtained by writing Dr. Asher Marks, American Thoracic Society, 1790 Broadway, New York 19, New York.

Congress on Occupational Health In Denver, October 2-4

The 21st Congress on Occupational Health, sponsored by the Council on Occupational Health of the American Medical Association in cooperation with the Colorado State Medical Society, will be held at the Brown Palace Hotel in Denver, Colorado, October 2-4.

The Congress serves as a meeting for the formal presentation of papers on occupational health as well as a forum in which occupational health problems and questions receive the attention of acknowledged experts in this field.

Subjects to be discussed during the conference include diagnosis of occupational illness by the general practitioner, relationship between the plant physician and the family doctor, workmen's compensation, the role of the occupational nurse, and the efficient utilization of the worker.

Dr. James G. Gaume, Chief of the Space Biotechnology Program at the Martin Company in Denver, will be the speaker at the banquet which will be held in connection with the meeting. His subject will be "Problems of Survival in Space."

Further information may be obtained by writing the AMA Council on Occupational Health, 535 N. Dearborn Street, Chicago 10, Illinois.

Medical Meetings, 1961

The following is a partial list of national, state and district medical meetings scheduled for 1961:

Sept. 15—W. Va. Heart Association, Morgantown.
Sept. 22-23—Ohio Chapter, ACS, Cincinnati.
Sept. 25-28—American Hospital Assn., Atlantic City.
Oct. 2-6—Endocrinology PG Course, Bethesda, Md.
Oct. 2-6—Am. Coll. Surgeons, Chicago.
Oct. 5—Rural Health Conference, Jackson's Mill.
Oct. 6-7—Cong. on Medical Quackery, Washington, D. C.
Oct. 11-12—W. Va. TB and Health Assn., Elkins.
Oct. 18—W. Va. St. Nurses Assn., Clarksburg.
Oct. 19-21—W. Va. Hospital Assn., Morgantown.
Oct. 23-24—American Cancer Society, New York City.
Oct. 27-29—PG Institute, Martinsburg.
Nov. 6-9—Southern Medical Assn., Dallas, Texas.
Nov. 11—Pediatric Conference, WVU School of Medicine, Morgantown.
Nov. 13-16—Interstate PG Assembly, Cleveland.
Nov. 13-17—American PH Assn., Detroit, Mich.
Nov. 17-21—National Society for Crippled Children, Denver.
Nov. 27-Dec. 1—AMA Clinical Meeting, Denver.

Southern Medical Meeting in Dallas

The 55th Annual Meeting of the Southern Medical Association will be held in Dallas, Texas, November 6-9. The headquarters hotel will be the Adolphus.

Prominent physicians throughout the country will appear as guest speakers before scientific sessions arranged by the 21 sections. There also will be general scientific sessions and symposia on medicoeconomics and other timely subjects.

Entertainment features will include the president's luncheon and a banquet. A program also has been arranged for wives of physicians attending the meeting.

Preview of AMA Clinical Meeting In Denver, November 26-30

The 15th Annual Clinical Meeting of the American Medical Association will be held in Denver, Colorado, November 26-30. The five-day meeting will offer physicians a combination of fundamental post-graduate knowledge, plus the latest findings in a number of areas of medical research which will be of benefit to physicians in their practice.

Leonard W. Larson, M. D.

The following is a preview of the scientific program which was prepared for publication by Dr. Leonard W. Larson of Bismarck, North Dakota, President of the American Medical Association:

As a former member for many years of the Council on Scientific Assembly, I have followed the progress and development of the winter clinical meeting from its inception. I can state without qualification that the program organized for this 1961 Denver meeting is the best that has ever been assembled.

At the annual meeting in New York City last June, the Board of Trustees and the House of Delegates once again put their stamp of approval on the winter clinical meeting as a vital part of the American Medical Association's service to its membership to provide continuing education and knowledge.

It is my personal hope and appeal that every member of the American Medical Association will take full advantage of the opportunities offered at the Denver meeting by attending all five days.

There are many highlights in the clinical programs that will be of value and interest to the clinician.

All of us in practice are well aware that the personal habits of our patients, plus the habits of the social group of which they are a part, play a major role in health. This phase of medicine has been studied in detail by a group of Colorado physicians, and they will present their findings in a series of papers at the Denver meeting.

Space medicine is very much in the news these days. Many of us are only vaguely aware that the research specialists in space medicine also are learning much that will be of value to the physician in everyday practice. Several specialists in space medicine will present papers analyzing some of these findings.

Every physician knows that heredity is important in tracing the patient's pattern of disease. The research scientists are now learning much more about this important aspect of medicine, and a section on genes and chromosomes and their implications in disease has been scheduled.

It is now possible to get bids and delivery dates on a full-fledged nuclear power plant for private industry. In fact, at least one of these plants already has been built. In the decade ahead there will be many more nuclear reactors in everyday use in many geographical areas.

Every possible safety precaution is taken in the installation and operation of a reactor, but there always is the human element, and accidents will happen. The physician in practice, sooner or later, likely will be faced with the problem of treating injuries from reactor accidents.

Specialists in this area will present several papers that will give those of us in practice considerable basic knowledge on how to treat patients suffering from reactor accidents.

I have listed only a few of the many highlights of the clinical program for the November meeting. There will be many other equally interesting and informative presentations.

The winter meeting is designed specifically for the clinician in practice. Let me repeat: the program this year is the best in the splendid history of this meeting.

Walter J. McNerney Named President Of Blue Cross Association

Walter J. McNerney, who has been serving as Director of the Bureau of Hospital Administration at the University of Michigan, has been named president of the national Blue Cross Association. He succeeds James E. Stuart, who became executive vice president of the Association in 1959 and president in 1960, and is now serving as chairman of the Association's Board of Governors.

Mr. McNerney directed the recently completed three-year study of hospital and medical economics under a $380,000 grant from the Kellogg Foundation.

Relocations

Dr. William H. Roush of Pt. Pleasant has accepted appointment as a United States Public Health Trainee in the Division of Endocrinology and Metabolism at the Ohio State University Medical Center. Doctor Roush, who assumed his new duties on July 1, will also serve as an instructor in the Department of Medicine.

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Dr. Eugene J. Ryan, Medical Superintendent of the DuPont Belle Works in Belle, West Virginia, has moved to Phoenix, Arizona, where he has established private practice in his specialty of occupational medicine. His offices are located at 346 East Elm Drive in Phoenix.

* * * *

Dr. Charles K. Rath, who has served during the past three years as chief surgeon at Guyan Valley Hospital in Logan, has moved to Hinton where he has accepted a position on the staff of the Hinton Hospital.

* * * *

Dr. Herbert P. Stelling of South Charleston has moved to Romney where he will continue in general practice. His office address in Romney is 290 North High Street.

New Association Members

Dr. Edgar Martin Corrill, Beckley Memorial Hospital, Beckley (Raleigh). Doctor Corrill was born in Cincinnati, Ohio, and was graduated from the University of Cincinnati in 1936. He received his M. D. degree from the University of Cincinnati School of Medicine in 1940, and served an internship at Jewish Hospital in that city, 1940-41. He served residencies at St. Mary's, Holmes and Drake Hospitals in Cincinnati, and at Philadelphia General Hospital and the Graduate School of Medicine at the University of Pennsylvania. He served in the Medical Corps of the United States Army, 1944-47, being released with the rank of Major. He was previously located in Cincinnati. His specialty is internal medicine.

* * * *

Dr. William Ellswood, Brooks Medical Building, Charleston (Kanawha). Doctor Ellswood, a native of Nanticoke, Pennsylvania, received his M. D. degree from Tufts University School of Medicine in 1949. He served his internship and had residency training at Hartford Hospital in Hartford Connecticut, 1949-55. He served as a Major in the Medical Corps of the United States Air Force. His specialty is radiology.

* * * *

Dr. J. Berrye Worsham, Jr., The Medical Clinic, Jefferson Avenue, Pt. Pleasant (Mason). Doctor Worsham was born in Danville, Virginia, and received his M. D. degree from the Duke University School of Medicine in 1953. He interned at St. Joseph's Hospital in Flint, Michigan, 1953-54, and had residency training at Memorial Hospital in Charlotte, North Carolina, 1957-61. He served as a Lieutenant in the Medical Corps of the United States Navy, 1955-57. His specialty is internal medicine.

Rhinologic Society Meeting in Chicago

The 7th Annual Meeting of the American Rhinologic Society will be held at the Belmont Hotel in Chicago on October 7. The meeting will be preceded by a three-day seminar and workshop at the Illinois Masonic Hospital in Chicago.

Dr. Ivan W. Philpott of Denver, Colorado, president of the Society, will present a paper on "Research and Education in Rhinology" at the opening session. One of the guest speakers will be Dr. Robert L. Goodale of the Harvard Medical School who will speak on "New England Pioneers in Rhinology."

Further information may be obtained by writing to Dr. Robert M. Hansen, Secretary, 2210 Lloyd Center, Portland 12, Oregon.

PG Course at NYU

A "Symposium on Vascular Surgery" will be held at the Postgraduate Medical School of New York Medical Center in New York City, November 8-11. Co-directors are Drs. Jere W. Lord, Jr., and Roy H. Clauss.

Additional information may be obtained by writing the Associate Dean, NYU Postgraduate School, 550 First Avenue, New York 16, New York.

ACCP Fellowships Conferred On Two State Physicians

Fellowship certificates were conferred on two West Virginia physicians during the recent meeting of the American College of Chest Physicians held in New York City.

The two new Fellows are Dr. Clark K. Sleeth, Dean of the West Virginia University School of Medicine; and Dr. Charles E. Andrews, Associate Professor of Medicine at the WVU School of Medicine.

Film on 'Diagnosis of Viral Meningitis'

The National Foundation has announced that a new teaching film, "The Diagnosis of Viral Meningitis," is now available for showing before medical society meetings.

The film covers clinical diagnosis and epidemological considerations; the collecting and handling of specimens for the laboratory; definitive laboratory procedures for isolations and identifications of etiologic agents; and new and faster methods of laboratory diagnosis.

The film may be obtained by writing the Department of Professional Education, The National Foundation, 800 Second Avenue, New York 17, New York.

ACCP Interim Session in Denver

The Interim Session of the American College of Chest Physicians will be held at the Brown Palace Hotel in Denver, Colorado, November 25-26. Scientific sessions will be held on Saturday morning, November 25, and on Sunday afternoon, November 26. The Board of Regents and Board of Governors of the College will meet on Saturday afternoon.

The Program Committee, under the chairmanship of Dr. Hollis E. Johnson of Nashville, Tennessee, president of the College, has announced that there will be panel and roundtable luncheon discussions in addition to the presentation of formal papers. Fireside conferences will be held on Sunday evening.

A copy of the program may be obtained by writing Mr. Murray Kornfeld, Executive Director, ACCP, 112 E. Chestnut Street, Chicago 11, Illinois.

PG Course at U. of Illinois

A postgraduate Course in Laryngology and Bronchoesophagology will be conducted by the Department of Otolaryngology at the University of Illinois College of Medicine in Chicago, October 23-November 4.

The course will be under the direction of Dr. Paul H. Holinger and registration will be limited to 15 physicians who will receive instruction by means of annual demonstrations and practice in bronchoscopy and esophagoscopy, diagnosis and surgical clinics as well as didactic lectures.

Further information may be obtained by writing Dr. Francis L. Lederer, Department of Otolaryngology, University of Illinois College of Medicine, 1853 West Polk Street, Chicago 12, Illinois.

Symposium on Genetics in Psychiatry In New York, Oct. 27-28

A Symposium on "Expanding Goals of Genetics in Psychiatry (1936-1961)" will be held at the New York State Psychiatric Institute in New York City, October 27-28, in conjunction with the Sixth Annual Meeting of the Eastern Psychiatric Research Association.

The Symposium will be held under the auspices of the New York State Department of Mental Hygiene and the Department of Psychiatry, College of Physicians and Surgeons, Columbia University. The program will feature a review of past and present research activities in psychiatric and behavioral genetics, together with an authoritative appraisal of recent advances in basic genetics.

Further information may be obtained by writing Dr. Wilfred Dorfman, 1921 Newkirk Avenue, Brooklyn 26, New York.

GP Meeting in Easton, Maryland

The 13th Annual Scientific Assembly of the Maryland Academy of General Practice will be held at the Tidewater Inn in Easton, Maryland, October 7-8. Scientific sessions will be held mornings and afternoons during the two-day meeting.

A feature of the meeting will be a panel discussion on "Morals in Medicine," which will be moderated by Dr. Andrew C. Mitchell of Salisbury, Maryland. Participating panelists will be representatives of the Protestant, Catholic and Jewish faiths.

Further information may be obtained by writing Mr. William J. Wiscott, Executive Secretary, Maryland Academy of General Practice, 3722 Greenmount Avenue, Baltimore 18, Maryland.

Working-Life Expectancy

In 1900, Health Information Foundation reports, the average twenty-year-old American male could expect to spend only 2.7 years in retirement. By 1958, however, retirement-life expectancy for a twenty-year-old male had more than doubled, reaching 6.3 years. The average length of working life for American males has increased by more than one-third since 1900, from about thirty-one to forty-two years. Since 1900 the life expectancy of the average male baby born in this country has increased by 18.5 years. The effect of this remarkable increase is to add 11.2 years to the American male's working lifetime and 7.3 to his dependent and retirement years.—New York State Journal of Medicine.

Congress on Prepaid Health Insurance

The second national Congress on Prepaid Health Insurance, sponsored by the AMA Council of Medical Service, will be held at the Sheraton-Chicago Hotel in that city, October 14-15. Among those participating in the meeting will be physicians, insurance and Blue Shield executives, industry and labor representatives, and others interested in prepaid health insurance.

Conference on Congenital Defects

The first Inter-American Conference on Congenital Defects will be held at the Statler Hotel in Los Angeles, California, January 22-24, 1962. The conference will be sponsored by the National Foundation and the University of Southern California.

Dr. Norman H. Topping, president of the University of Southern California, will serve as general chairman. Program topics will include genetic defects, structural defects and clinical manifestations of genetic and structural defects.

Further information may be obtained by writing Stanley E. Henwood, Executive Secretary, International Medical Congress, 120 Broadway, New York 5, New York.

ACP Course at Duke University

The American College of Physicians will sponsor a postgraduate course on "The Physiologic Basis of Internal Medicine" at the Duke University Medical Center in Durham, North Carolina, October 9-13. Co-directors are Drs. Eugene A. Stead, Jr., and Elbert L. Persons.

The course will deal with recent progress in understanding, diagnosis and treatment of disease in the major areas of internal medicine. Emphasis will be placed on the physiological mechanisms underlying the disease process.

Further information may be obtained by writing the American College of Physicians, 4200 Pine Street, Philadelphia 4, Pennsylvania.

AMA Administrative Staff Promotions

Two administrative staff promotions in the American Medical Association were announced last month by Dr. F. J. L. Blasingame, Executive Vice President of the AMA.

Leo E. Brown, director of communications, has been promoted to a new position as assistant to the executive vice president. Jim Reed, director of press relations and editor of the *AMA News*, takes over as director of the Communications Division.

In his new position, Mr. Brown will assist officers and members of the Board of Trustees when they are speaking for or representing the AMA, expand liaison with various national organizations, assist division directors in planning and carrying out AMA programs, and assist in the administrative duties of the office of the executive vice president.

Mr. Reed will be responsible for supervising and coordinating the AMA's overall communications to the medical profession, to the general public and to communications media.

Mr. Brown joined the AMA staff in December, 1950, and became public relations director in 1951. He was named director of communications when that division was created in 1959. Mr. Reed came to the AMA in 1958 to start the *AMA News* after serving more than eight years as editor of the *Topeka Daily Capital* in Kansas.

The West Virginia Medical Journal

October, 1961 Vol. 57, No. 10

Presidential Address*

John W. Hash, M. D.

Mr. Chairman, fellow members of the West Virginia State Medical Association, members of the Woman's Auxiliary to the West Virginia State Medical Association and distinguished guests:

Many of you here tonight are weary of hearing your President come to you each year at this time and tell you that the year has been fraught with crises for the free practice of medicine. This has been a truthful statement of each of your past presidents since the early thirties.

I must repeat that now-old phrase in reporting to you upon the events of the past year. At the turn of the year, it seemed as if our cause were lost. At this time we believe that legislation may be delayed for awhile. But as long as forces exist in this country which look to Washington as one looks to a great white father for all our care, we cannot relax our efforts to point out to the American people the existing threats to American freedoms.

Getting rid of responsibilities does not give an individual more freedom; it merely gives the government more control of his life, thereby actually lessening individual freedom.

Former Vice President Nixon has said: "I see in this fight the whole battleground of regimentation against free choice, of centralized governmental control, against local and individual initiative, bureaucratic decision making against creative enterprise. We are asked to believe that the only way to provide our senior citizens with adequate medical care is by compulsory payroll taxes on all wage earners, by compulsory insurance, by compulsory participation in one massive, rigid, government-controlled scheme."

*Annual Address of the President, West Virginia State Medical Association, 94th Annual Meeting, The Greenbrier, White Sulphur Springs, August 23, 1961.

The Author

- **John W. Hash, M. D., Charleston, W. Va., Immediate Past President of the West Virginia State Medical Association.**

West Virginians in general, and the physicians of this state in particular, have recognized and accepted this responsibility of caring for our aging population. We like the non-compulsory way of doing it.

MAA Program in West Virginia

The West Virginia Legislature implemented the Kerr-Mills Law on October 5, 1960, during a special session called by Former Governor Cecil H. Underwood.

Governor W. W. Barron, the Department of Welfare, the West Virginia State Medical Association, the Hospital Association, the Pharmaceutical Association, Nursing Homes, etc., through cooperative effort, have given the over 65, eligible, citizens of West Virginia adequate medical and hospital care.

Our Medical Assistance for the Aged Program covers acute illnesses, exacerbations of chronic diseases, and medications for a certain group of chronic conditions including: diabetes, arthritis, cardiovascular diseases, Parkinson's disease, and others. This type of care, based on need is the best way to care for our older citizens.

The MAA Program does not impose itself upon those citizens who neither want, nor need it.

Statistics based upon a survey of hospital administrators during a three-year period prior to 1960 (which enjoyed a 97 per cent return on questionnaires sent during West Virginia's preparation for the White House Conference) re-

vealed that only 33 per cent of West Virginia's over 65 citizens paid their own way. These statistics showed the financial sources of coverage of over 65 citizens are:

Blue Cross—10.3 per cent
Private Insurance—16.9 per cent
State Agency—23.6 per cent
Other Third Party—15.5 per cent
Private Pay—33.7 per cent

Another interesting statistic in this survey, which included actual experience of hospitals over a three-year period, revealed that the average length-of-stay of over 65-year-old patients was 7.3 days. The average length-of-stay of all patients was 7.1 days. This figure is far removed from those statistics given by advocates of the Social Security approach.

'The Means Test'

Our over 65 citizens are using the MAA Program to an equitable extent and abuse has been minimal. Our program has been successful *because* of the "the means test" which has not embarrassed anybody. Life, itself, is a "means test." One cannot buy a car, build a house, enter college, without undergoing a "means test" and this is good: this is American! Our federal government has used this test in many of its programs —the F.H.A. for example. If it is good in the F.H.A., Veterans and other programs, it is good for citizens over 65.

Under MAA, the federal, state, and local teamwork reduces excessive controls by any one group, promotes state and local responsibility, and minimizes dependency on the federal government. We believe that the best approach is cautious as regards spending, conservative as regards imposing taxes, and efficient in its administration.

The care of the aged is the responsibility of our total society. Under the MAA Program, payments are made for hospital care, nursing home care, drugs, appliances, certain transportation, and for professional services. Under the provisions of HR 4222 no provision is made for payment of professional services. The professionals should not be subjected to underwriting any social services program to an extent greater than their just share of taxation. Our society frowns upon discrimination. Incentive and ambition will be destroyed if our tax burden continues to rise. Family responsibility and the responsibility of the individual to prepare for his retirement would be diminished under the Social Security approach.

As practicing physicians we are aware of the many who would abuse a program that Social Security would pay for. Recently a case was brought to my attention in which vigorous effort was made by a couple who wanted to put Papa in a nursing home while they went on vacation. Isn't it reasonable to ascertain the need for the government to pay for such care?

We believe that the Kerr-Mills Law should be given adequate opportunity to prove its worth without political interference. If the Congress of the United States felt in 1960 that this was a good solution to the problem, why should not the Congress of 1961 be willing to give the program a chance? Is this problem a political, or a humanitarian one?

Helping Those Who Need Help

As Americans, we believe that our aged citizens who *need* medical care should get it, whether or not they can afford to pay for it. The medical profession favors a program of Medical Aid for the Aged sensibly designed to help those who need help. I agree with my Kiwanis friend, Oren Arnold, who has said: "Down with government subsidy. I've seen what it did to the Indians."

Community Service

Let us turn now to the pleasant side of the past year. It has been a thrilling experience to meet with you in your Societies, to be invited into your homes, and to meet your families. Beulah and I, both, appreciate your very gracious hospitality everywhere we have gone. In all of your communities I saw the wonderful contributions you and your families are making to public service. These facts were the inspiration for the Presidential Citations which will be given at our dinner on Saturday night. You will be amazed and thrilled, as I was, when you learn of the activities for which these Citations will be awarded.

The most recent public service that has come to my attention is the part played by members of the Kanawha Medical Society and its Auxiliary after the disastrous flood in Charleston on the night of July 19. Many hundreds of hours of service were given by doctors who manned the first aid stations and rode Jeeps and waded water to get to stricken patients; by Auxiliary members who are registered nurses, who gave generously of their time at the inoculation stations. Many other Auxiliary members worked as clerks at the stations and as clerical workers and in the motor corps for the Red Cross. There are many unsung heroes in our community who served but none more so than our Society members under the leadership of Dr. William B. Rossman and our Auxiliary under the leadership of Mrs. William R. Rice, and the committee chairmen of the two.

Medical Careers

We have looked at our past. No less important is the future of our profession. We must not relax our efforts in recruiting young people to enter medicine and the allied fields. It is only to be expected with the threat of socialized medicine and the unsavory picture that has been painted in the press of our profession and our parent organization, the American Medical Association, that young men and women are reluctantly turning to other fields even though they have wanted to study medicine. We must show, by example, that ours is a good life, full of rewarding experiences, being able to promote sound health, to lengthen the lifespan, to alleviate pain and ease the suffering of our fellowmen. Our Code of Ethics still remains of the highest and the physician-patient relationship which has been held near-sacred through the ages must be preserved.

We are all aware that more than tax dollars are needed to provide medical education. We all look with pride to the American Medical Education Foundation and the part we play in it. During the first six months of this year, West Virginia doctors contributed $9,478. This represents $4,255 more than was contributed in 1959-60 and means that 65 per cent of our members participated. May I congratulate you on this splendid showing and share with you the pride we all feel in presenting this amount to our own West Virginia University School of Medicine.

We are proud, too, of the scholarship we give each year to a deserving student to study at our School of Medicine. As I sat in on the interviews of sixteen applicants this year, I wished that we could take them all "under our wing" to sponsor their medical educations. I realized more clearly than ever before that we must do more to help qualified young men and women to study medicine who are not financially able. Please continue to give to your favorite loan fund and to AMEF.

Achievements of the Auxiliary

I wish to commend our Auxiliary for the outstanding achievements of the year under the able leadership of the president, Mrs. Clark K. Sleeth. We were all proud of the report given by Mrs. Sleeth for West Virginia during the AMA Auxiliary meeting in New York in June. In every community in West Virginia doctors' wives are meeting the challenge of showing the public that our families are a vital part of the community, and making our just contribution to the educational and cultural life of our home communities.

I have come to the point where I should say many thank-yous. May I first thank Dr. Marion F. Jarrett, Dr. Mike Kovacevich, Dr. John L. Crites and Dr. Robert E. Stone for taking good care of my patients when I was absent from the city. I want to say thank you to the members of our loyal State Headquarters staff, Mrs. Mary Hamilton and Miss Becky Linville. This has been a difficult year for them when they lost their beloved and revered boss, Mr. Charles Lively. And to Bill Lively, our Executive Secretary, who with the burden of sorrow he bore, never at any time neglected the duties of both his father and himself. I owe a special thank you to all of our past presidents who have counseled me kindly, advised me gently, and stood by me always. To my Council, and Dr. J. C. Huffman, its Chairman, I must say thank you for your wisdom, your hearty cooperation, and your loyalty. I should say "thank-you" too, to my patient family and my sympathetic banker.

It would be impossible for me to say "thank-you" to all the members of committees whose service, loyalty and devotion to assigned tasks have made possible any forward strides and any successes this administration has enjoyed. May I only add my humble gratitude? I shall forever cherish the high privilege I have had in working with all of you this year.

. . . the only something you get for nothing is failure.

Arnold H. Glasow.

Changing Brittle to Stable Diabetes*†

Thomas H. McGavack, M. D.

THE plight of the brittle diabetic is not a happy one. He is poised precariously between coma and hypoglycemia. Fortunately the condition is rare, and the temerity to say what follows is born of a sincere desire to aid the physician in the practical management of the brittle state. For therapeutic purposes, the brittle diabetic, whether juvenile or adult, too often is placed in the same category as the stable diabetic. Nothing could be more disastrous.

General Nature of Case Material

The cases of eleven brittle juvenile diabetics and seven brittle adult diabetics followed for periods of from one to eighteen years are used to illustrate some of the points to be borne in mind in treating the brittle diabetic state (Table 1). Of the eleven children, five were male and six were female; in the adult group, four were male and three were female (Table 2). In accordance with White's classification, onset in the juvenile diabetics was acute in three, rapid in four and gradual in four. For the adults, onset was gradual in all seven. The nature of onset seemed to have little to do with the severity of symptoms or the difficulties encountered in their control.

Of the eleven juvenile diabetics, five were 10 years of age or less at the time of onset, with a range of age between 2.5 and 15 years and an average of 9.8 years (Table 3). The juvenile cases were first observed at ages ranging from 2.5 to 41 years with an average of 17.1 years. In one of these, the patient, 2.5 years old (Case 11), was followed from the time of onset, while the 41-year-old woman (Case 8) came under surveillance 26 years after onset. These patients were last seen when their ages ranged from 16 to 43 years with an average age of 25.7 years. In other words, they were followed for periods of time ranging from 2 to 18 years with an average of 8.6 years.

Three of the patients were over 30 when last seen, actually age 32 (Case 9), age 33 (Case 7) and age 43 (Case 8). Of the three, only the 43-year-old had unmistakable clinical evidence of atherosclerosis and severe retinopathy as major manifestations. She had been on a highly inflexible regimen until the age of 41, with very frequently repeated insulin reactions, and was first seen by us at that time.

Of the seven adults, the age at onset varied from 22 to 57 years, with an average age of 43.5 years (Table 3). Two of these subjects had been "brittle" throughout the duration of the disease, a period of six years for one (Case 12) and of five years for the other (Case 18). These adults were first seen at an average age of 52.1 years with a range of 28 to 62 years or, in other words, an average of 8.6 years from the time of onset. They

The Author

- **Thomas H. McGavack, M. D., Chief, Intermediate Service, Veterans Administration Center, Martinsburg, W. Va.; and Professorial Lecturer in Medicine, George Washington University School of Medicine, Washington, D. C.**

Table 2

18 "BRITTLE" DIABETIC PATIENTS

	Juvenile	*Adult*
Sex		
Male	5	4
Female	6	3
Type of Onset		
Acute	3	0
Rapid	4	0
Gradual	4	7

Table 3

18 "BRITTLE" DIABETIC PATIENTS

	JUVENILE (11 pts.)		ADULT (7 pts.)	
	Range	*Aver.*	*Range*	*Aver.*
Age (yrs.)				
Onset of disease	2.5-15	9.8	22-57	43.5
First seen	2.5-41	17.1	28-62	52.1
Last seen	16-43	25.7	29-73	56.1
Total Period of Observation (yrs.)	2-18	8.6	1-12	4.0
Control Achieved In Months	1-24	11.1*	0.5-3	1.5**

*Based on 10 patients; one was never controlled.

**Based on 5 patients; two were never controlled.

*Presented before the Ninth Annual Scientific Assembly of the West Virginia Chapter, American Academy of General Practice, in Charleston, May 20, 1961.

†From the Intermediate Service, Veterans Administration Center, Martinsburg, W. Va.; and the Department of Medicine, George Washington University School of Medicine, Washington, D. C.

Submitted to the Publication Committee, January 20, 1961.

Table 1

CLINICAL DATA FROM 18 "BRITTLE" DIABETICS

JUVENILE

CASE NO. AND SEX	ONSET Age	ONSET Type	Age 1st Seen	THE "BRITTLE PROBLEM" Precipitating Factors of Problem When First Seen	Time to Control (Mos.)	At time first seen (A); Control (B) and Last seen (C) Diet (Cal.) A	Diet (Cal.) B	Diet (Cal.) C	Insulin* (U.) A	Insulin* (U.) B	Insulin* (U.) C	Height (cm.) A	Height (cm.) B	Height (cm.) C	Weight (kg.) A	Weight (kg.) B	Weight (kg.) C	Age Last Seen	Remarks**
1. PW (F)	5.5	Acute	7	Natural course of disease. Inflexible regimen.	18	1445	1930	2300	12-R 5-P	25-R 12-P	20-L	125	130	166	24.4	28.4	58.4	25	Puberty (11.5) unev Top insulin dose was
2. JG (M)	11	Rapid	13	Prepubertal growth spurt. Guilt complex. Hyperinsulinism.	24	1800	2350	2550	76-N	45-N 20-P	30-L	153	171	180	49.6	61.3	72.4	24	
3. NE (F)	6	Gradual	14.5	Puberty. Inflexible regimen. Hyperinsulinism.	1	1900	2400	2400	52-N 7-R	50-N 4-R	40-N	150	152	163	42.2	43.5	57.0	24	Patient rebellious. oversolicitous. Catam 14 yrs. 9 mos.
4. PO (F)	10	Rapid	15	Post-pubertal growth spurt. Guilt complex. Meal hours.	3	1800	2400	2450	45-R 20-P	25-N	35-N	164	164	171	48.1	50.3	59.3	21	Catamenia—12.5. Oversolicitous parent
5. ME (F)	14	Gradual	18	Emotional conflict. Inflexible regimen. Irregular meal hours. Hyperinsulinism.	13	2000	2700	2375	60-N 52-N	40-N	32-L	155	161	161	51.4	55.4	54.8	26	In love; afraid to diabetes. Afraid of Catamenia at 14.5.
6. MO (M)	7	Acute	13	Emotional conflict. Family example—meal hours. Hyperinsulinism. Puberty.	Uncontrolled	1765		2750	60-R 20-P		Variable	154		163	42.0		57.1	19	Repeated coma & Irregular eating & Died in coma. Bad etc. Easy to cont hosp. on as little as daily.
7. TC (M)	15	Gradual	21	Hyperinsulinism with leg cramps. Meal hours.	2.5	2000	2300	2300	55-P 55-P	15-R 40-P	30-L	163	163	163	57.1	59.1	61.3	33	Subject to shock. coma 3x before w him.
8. EW (F)	15	Rapid	41	Inflexible regimen. Hyperinsulinism.	18	2265	2265	2265	60-N + Reg.	40-L	35-L	165	165	165	58.0	57.8	58.3	43	Severe CVR damage first seen (retinop Insulin the variable
9. EW (F)	14	Gradual	30	Language & food difficulty with irregular eating.	11	1940	2400	2400	50-P	25-R 10-P	25-R 10-P	150	150	150	51.7	54.4	55.7	32	Catamenia—12. Re shock. Coma 2x in p
10. AR (M)	8	Acute	13	Never well controlled. For PZI trial. Puberty.	19	1710	2200	2400	35-R 30-R 30-R 25-R	60-R 20-P	50-L	150	161	164	39.9	52.3	56.7	18	
11. JK (M)	2.5	Rapid	2.5	Family history. (No infections).	3	1300	1300	2550	200-R 1st 3 days	5-R 5-R	30-L	93	95	169	12.1	14.1	60.4	19	Puberty age 13. up to 60-N.

ADULT

CASE NO. AND SEX	ONSET Age	ONSET Type	Age 1st Seen	Precipitating Factors of Problem When First Seen	Time to Control (Mos.)	Diet (Cal.) A	Diet (Cal.) B	Diet (Cal.) C	Insulin* (U.) A	Insulin* (U.) B	Insulin* (U.) C	Height (cm.) A	Height (cm.) B	Height (cm.) C	Weight (kg.) A	Weight (kg.) B	Weight (kg.) C	Age Last Seen	Remarks**
12. ME (M)	22	Gradual Coma	28	Hyperinsulinism. Irregular hrs. of eating. "Sugar coverage." "Sugar fear." "Weight fear."	Uncontrolled Brittle from onset	2000 to 3000	Same	Same	60-R — 120-R	Same	Same	168	168		56.0	58.1		29	Suicide—Coma 4x. 2-5 weekly. Refuse pitalization.
13. OE (M)	39	Gradual Coma	54	Emotional conflict & worry. Inflexible regimen. Hyperinsulinism.	One partial	2350	2350	2350	65-R — 30-R + Reg.	35-N	35-N	173	173		68.6	68.1		55	Shocks ½ to 1 Marked urinary swings. Suicide ½ later.
14. JM (F)	57	Gradual Urine	61	Inflexible regimen. Hyperinsulinism.	½	1710	2100	2100	15-R — 30-R	5-R	5-R	165	165		75.0	74.1	67.7	73	Eventual weight 67. FBS varying from 1 135. Watched to a
15. MS (F)	46	Gradual Coma	61	Inflexible regimen. Guilt complex. Hyperinsulinism.	3	2200	2200	2100	65-N	25-R	0	157	157	157	60.0	60.9		63	Shock aver. 1x wkly 4+ sugar at other
16. MB (M)	52	Gradual Boil	62	Irregular eating and drinking. Hyperinsulinism.	3	2600	2600	2600	50-N to 65-N + Reg.	40-N	10-N	163	163	163	54.1	50.9		63	Total period of obse 56 weeks. Originally ed 10-N U. insulin.
17. WS (F)	33	Gradual Urine	38	Nature of the disease. Hyperinsulinism.	Uncontrolled Brittle	2300	2300	2300	40-N to 120-N + Reg.	40-N to 120-N + Reg.	40-N to 120-N + Reg.	153	153	153	51.8	50.0	50.0	49	Death, heart failur Never controlled. with sugar & ketone True ketosis if insul enough. OHA mad worse.
18. ML (M)	56	Gradual Urine	61	Sugar coverage. Repeated infections with fever. Irregular meals.	Partial Control	1800	1800	1800	60-N + Coverage	40-N + Coverage	15-N	165	170					64	Died, Insul. shock coronary occlusion, 6 insul. & OHA. Us sulin—25U daily fo with good control.

*Regular insulin is shown with letter "R" following figures, e. g., 10-R; PZI is shown with letter "P" following figures, e. g., 10-P; NPH insulin is shown with letter following figures, e. g., 10-N; and Lente insulin is shown with letter "L" following figures, e. g., 10-L.

**For brevity's sake the word "shock" has been used in this column to represent insulin reaction.

were followed for four years, on an average, with a range of follow-up varying from 1 to 12 years.

All patients were out of control when first seen. Under existing conditions, it was not possible at any time to control one of the juvenile diabetics in whose case the disease had appeared at the age of 7, who was first seen by us at the age of 13 and who died at the age of 19, in coma probably complicated by severe coronary sclerosis and occlusion (Case 6). In the remaining cases, it required from 1 to 24 months, with an average of 11.1 months, to bring the juvenile subjects under good control.

Of the two adults who were never controlled during our period of observation, one was a woman with scleroderma, with onset of diabetes at age 33, who was first seen for treatment at age 38 (Case 17, Table 1 and Addendum). The second uncontrolled adult was a 28-year-old mechanical engineer with gradual onset of diabetes at age 22, finally culminating in suicide (Case 12, Table 1 and Addendum).

Common Features of Case Material

We have grouped these 18 diabetic patients together because the "brittleness" of each shares several features in common with that of the others. In the first place, insulin resistance was present in some form in every subject. Only one of the patients, a 7-year-old girl in whom diabetes had begun at the age of 5.5 years, was using less than 50 units of insulin when first seen. Circulating insulin antagonists, growth hormone and enzymatic blocking agents, all could be suspect as anti-insulin factors.

In the second place, we have grouped these cases together because widely and rapidly fluctuant responses to insulin were present in each. Within a few hours, marked glycosuria and hyperglycemia often changed to aglycosuria with or without ketonuria or insulin reaction and, as rapidly, back to the preceding state.

Table 4

CLINICAL FACTORS PRECIPITATING "BRITTLENESS" IN 18 DIABETIC PATIENTS

	No. Patients	
Item	*Juvenile*	*Adult*
Natural course of disease	11	1
Linear growth	5	...
Irregular eating habits	5	3
Emotional problems	8	5
"Guilt complex," phobias, etc.	(4)	(3)
Inflexible regimen	(4)	(2)
Repeated insulin reactions	6	6
Sugar "covering"	0	3
Total	35	18

Third, ketonuria was observed not only with the spillage of large amounts of sugar but also occasionally with the appearance of and immediately following an insulin reaction. With these bouts of ketonuria at the time of insulin reaction, none of the symptoms or signs of ketoacidosis was present. Nor were acidotic manifestations in evidence when 4 plus urinary and very high blood sugar were found. In such instances, the daily doses of insulin usually were not changed, perhaps at times even were lowered. If, however, there was a rapid loss of weight or any overt symptom of acidosis, the hyperglycemia, glycosuria and ketonuria were vigorously treated, just as any other diabetic coma should be.

Finally, if, in these patients, acidosis was not present, i. e., if ketosis existed without acidosis, the brittle state was made even more brittle by too rapid reduction of the glycosuria and hyperglycemia. Aggravation of the brittle state was particularly pronounced whenever reaction to insulin was produced.

Factors Precipitating the "Brittle" Diabetic State

The factors precipitating brittle diabetes in eighteen patients were more numerous than the total number of patients as more than one cause appeared to be operative in a number of the subjects—35 in the 11 juvenile subjects and 18 in the 7 adults (Table 4).

1. *Natural Course of the Disease.*—In the 11 juvenile subjects, the natural course of the disease obviously was operative in all. Among the adults was one patient with scleroderma; the natural course of the disease undoubtedly played a role. Hereditary factors are to be considered in all cases of diabetes, but their specific role in the production of the brittle state needs amplification. Control of the condition always is easier if care is taken to avoid overweight and infection. Proper dietary, proper hygiene and immunizing injections will aid in these matters.

2. *Linear Growth.*—It obviously is impossible to avoid linear growth spurts. Evidence in the present cases, however, would lead us to believe that good control up to the time of such spurts may enable the physician to carry the patient through such periods with very little or no trouble (e. g., Case 1, Figure 1 and Addendum). This was, indeed, accomplished in the two of the 11 juvenile subjects, who were first seen prior to these parapubertal changes.

3. *Irregular Eating Habits.*—Marked irregularity in the time of eating and in the amounts taken was certainly a factor in developing the brittle-

ness seen in five of the juvenile subjects (Cases 4, 5, 6, 7 and 9) and in three of the adults (Cases 12, 16 and 18). Diet remains a sheet anchor in the treatment of diabetes. It must be adequate

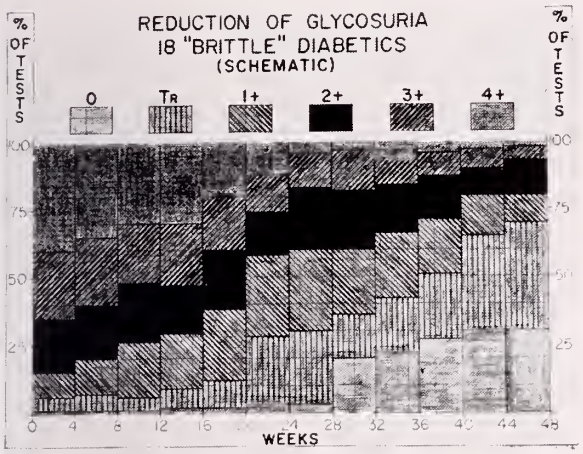

Figure 1. Schematically represented here are the composite urinalyses of 18 patients from the time when first observed to the achievement of good control. This interval actually varied from 0.5 to 24 months. Control should be considered good in these severe cases of "brittle" diabetes when 80 or more of the fractional urinalyses show glucose 1+ or less.

for growth and adult nutrition but not sufficient to encourage or produce overweight. It can be adjusted to the patient's individual needs. Here it seems well to emphasize the fact that the patient is primarily a human being and secondarily a human being who happens to have diabetes. Too many diabetics, whether thus taught or not, become slaves to the disease when they should be its masters. Adjustments in diet and habit, insofar as possible, should be made to fit their particular needs. They should not be forced into a stereotyped mold of behavior or action. It is surprising how many irregular eating habits disappear when we adjust the diet to the given individual rather than attempt to adjust him through our preconceived notions of what the diet should be.

4. *Emotional Problems.*—In the diabetic patient, emotional problems develop similar to those encountered in the nondiabetic. In addition, he is subject to emotional disturbances related to his morbid state and too often, unfortunately, also to its treatment. His condition can be aggravated by either of these types of sensorial upset. Among the emotional disorders associated with the disease and the patient's concept of it, are various phobias and "guilt" complexes. All too often the physician or the family, or both, are responsible.

Readily discernible emotional problems were present in 13 individuals. Frequently repeated insulin reactions had been observed in 12, while all subjects had had such reactions in one or more instances. "Sugar covering" with additional insulin had been a common practice with 3 of the adults. One of the commonest emotional problems with which we have had to contend is a "guilt complex" which develops at any time the patient tests the urine and finds sugar. Obviously this results from wrong training or incorrect interpretation of the physician's comments to the patient. Nevertheless it had been so strongly impressed on some of the patients in this series of cases that they had failed to keep appointments for fear they would be scolded for showing sugar in the urine. Often this problem is vicious. In two instances (Cases 12 and 13), it resulted in suicide. It is the most common single cause of insulin reaction, for it leads to "sugar covering" with regular insulin. The repeated added doses of insulin, the insulin reaction and the necessary added food all work together to aggravate the lability of this brittle type of diabetes. In at least 5 of our 7 adult cases, this philosophy and the consequential actions played a readily recognizable role in producing the brittle state.

While the physician often is taught to consider all diabetic subjects somewhat untruthful and, therefore, to be censured, often without a hearing, for any infraction of the regimen, there are, certainly, a great many diabetics who are overly conscientious and for whom an inflexible regimen may be disastrous. We believe this to be true in four of the juvenile and two of the adult cases mentioned in the present discussion.

5. *Repeated Insulin Reaction.*—Frequently repeated insulin reactions had been observed in twelve of eighteen patients, while all subjects

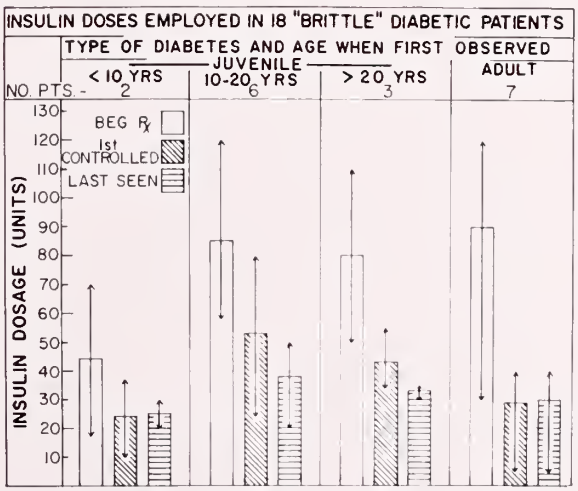

Figure 2. Insulin dosage in 18 brittle diabetics. Age is related to the time when patients first came under our observation. The arrows represent the range of dosage in each instance.

had had such reactions in one or more instances. When combined with irregularity in eating and a tendency to take added doses of insulin for each appearance of glycosuria, such reactions increase the lability of the disease and can be instrumental in converting previously stable diabetes to the brittle form. With appropriate treatment, insulin reactions disappeared in 8 of these 12 patients subject to frequent attacks. Simultaneously, the diabetes became less brittle. In four patients who, for one or more reasons, refused to follow the prescribed regimen, the diabetic state remained brittle or became even more so.

6. *"Sugar Covering."*—Unfortunately, some patients have been trained to use extra insulin when urinary tests show any sugar. In the brittle diabetic this is a common source of insulin reaction, which throws an extra load on physiologic homeostatic mechanisms, to say nothing of the emotional perturbation previously discussed. "Sugar covering" has no place in the routine management of the brittle diabetic and is to be condemned and abhorred by physician and patient alike.

In dealing with the above factors which frequently precipitate the brittle diabetic state or aggravate that previously existing, our first great effort must be directed towards gaining the cooperation of the patient. Without patient-physician rapport nothing can be accomplished. Rapport seemed not to have existed previously in most of the eighteen cases herein described.

To be effective, the physician first must recognize the lability of the condition with which he is dealing. When this is done, frank statements to the patient usually will establish a very useful understanding.

The Glycosuria, Hyperglycemia and Ketosis of Brittle Diabetes

The vagaries of blood sugar and urinary sugar and acetone bodies during the early and sometimes prolonged period of poor control to be experienced in treating the brittle diabetic are well illustrated by the histories of two of our juvenile diabetics detailed in the addendum (Cases 1 and 2, Figure 3A and B and 4). These are representative of our therapeutic problems in all of the cases in the present study. It seems clear that glycosuria and hyperglycemia must be relieved gradually. Despite our best efforts, there often will be sudden changes in tolerance. Our wisest defense against this is a pliable but steady regimen, so adjusted that glycosuria and hyperglycemia disappear slowly. Undertreatment rather than overtreatment with insulin is the keynote. The dietary and hours of eating should be as rigidly fixed as possible, but adjusted thoroughly in the beginning to the patient's own routine of living.

The speed with which glycosuria and hyperglycemia were reduced in our 18 subjects is schematically represented in Figure 1, in which the percentage of urinalyses showing various amounts of sugar from 0 to 4-plus is charted on the ordinate against four-week periods of the selected regimen on the abscissa. One of the adult patients (Case 14) was readily controlled in 2 to 3 weeks, when her rigid regimen of high insulin dosage with repeated reactions was altered. At the other extreme, one of the juvenile patients (Case 2—Addendum) required two years to achieve control, despite good cooperation and understanding between him and the physician. The chart indicates the speed of change for the average of the 18 patients—48 weeks or 11

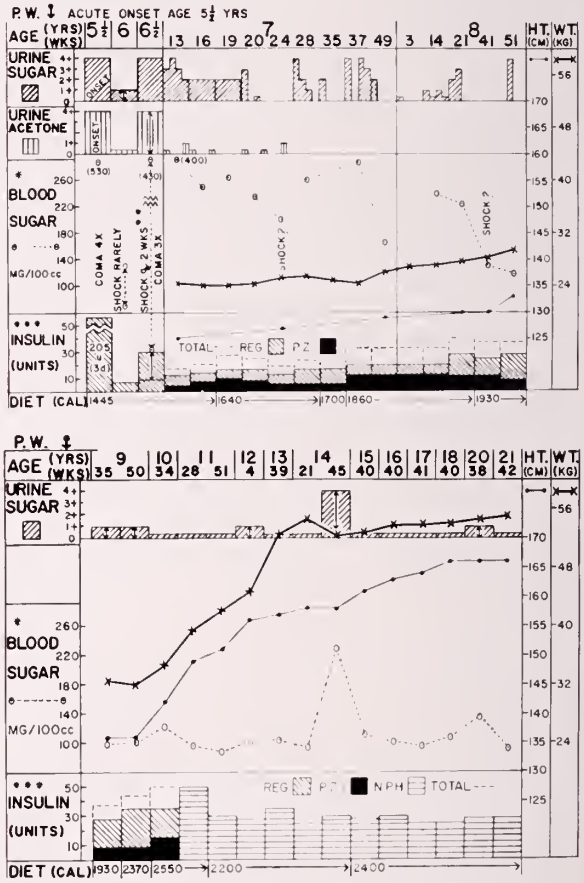

Figure 3A and B. P. W. Case 1—Selections from a continuous record of this patient from 5.5 to 21 years. Blood sugar* was determined by the method of Folin-Wu. Insulin reactions, referred to as "shock" in the figure, had occurred on an average of bi-weekly in the period from 6.5 to 7.25 years of age; actually 5 times in the week immediately prior to our seeing her. Note the relatively good control achieved by the end of the eighth year. The break in tolerance in the 14th year was due to a severe infection; several months were required to regain the previous degree of control.**

*****Only major adjustments in insulin are shown. With long acting insulins, however, adjustments were made at 3-day or greater intervals unless an insulin reaction occurred.**

months. At the beginning of treatment, 85 per cent of all urinalyses showed 2 plus or more sugar, while 1 per cent of the analyses was negative for sugar. Control in cases like these 18 should be considered good when 80 per cent or more of all urinalyses in the individual subject show 1 plus or less sugar, as seen on this chart between the 44th and 48th week. Even then, in many instances, fasting and postprandial blood sugars may remain moderately high, if we are to avoid insulin reactions and a renewed break in patient control. From this point of reasonable control onward, aglycosuria and normoglycemia can be slowly achieved, as insulin dosage is even further lowered and dietary kept constant for the individual's needs.

Insulin Dosages Employed in Controlling Eighteen Brittle Diabetic Patients

Changes in insulin dosage in the 18 diabetic subjects at the beginning of treatment, when first controlled and when last seen, are shown in Figure 2. From this chart, it is evident that of the subjects with juvenile diabetes, those first seen between 10 and 20 years of age required the highest initial doses, ranging from 59 to 120 units daily, with an average of 85 units. The duration of the disease in these six subjects averaged 5.4 years, but in the individual case had little to do with the insulin requirement. This appeared to be closely linked to the pubertal or parapubertal growth spurt (Table 1). On the regimens used, the two subjects first observed before the age of 10 years (Cases 1 and 12), when last seen at ages 25 and 19 respectively, showed the lowest insulin requirements of any of our subjects. This may indicate the value of a slow but steady progress towards control in the brittle subject, unpunctuated by frequent insulin reactions with their attendant physical, physiological and psychological alterations. The juvenile cases first seen after maturity required an average of 80 units initially with a reduction to 43 units daily when fully controlled. In fact, they behaved towards insulin much as did those adults who acquired the brittle state after maturity (Figure 2).

If data for the 11 juvenile patients are averaged, it will be noted that they were using from 17 to 120 units of insulin daily when first seen, with an average of 76 units. When initially controlled, the dosage varied from 10 to 80 units, with a reduction in the average to 45 units. When last seen, the average for these same subjects was 34 units and the range was from 20 to 50 units. In the 7 adults with maturity-onset brittle diabetes, averaged daily doses of insulin before, when first controlled, and when last seen, were 90, 29 and 30 units, respectively.

Whether improvement in all of these patients is due to the removal of an insulin antagonist or improvement in islet cell function is not touched upon by these observations, but the fact that relatively minor infractions of good care can initiate a chain of events leading to the brittle state tends to incriminate the former mechanism.

Principles for Controlling the Brittle Diabetic Patient

As a result of the experience with the eighteen present subjects, as well as that with other patients of brittle type, it is suggested that brittle diabetes may be changed to stable diabetes by attention to the following points:

1. Diabetes is not a mathematical disease and cannot be treated mathematically.

2. The diabetic patient is first of all a human being and only secondarily a diabetic.

3. Glycosuria and hyperglycemia are not crimes; in the brittle diabetic they are necessary evils by which we may avoid insulin reactions and acidosis.

4. Good control, meaning normoglycemia and aglycosuria, is a goal for every diabetic but one not to be achieved at the expense of insulin reaction. We must make haste slowly. Good control must not be rigid and inflexible; rather, it must be practical and attainable.

5. A well regulated adequate diet is the first prerequisite of treatment and should include regularity not only in the amount of food ingested but also in the hours at which food is taken.

6. Changes in the regimen of the diabetic should be made slowly and should take into account urinary sugar and acetone, blood sugar, growth curve, weight and the diabetic's activities.

7. Instructions to the patient should be concerned with (a) reassurance regarding the nature of his disease and the problems involved in its mastery, (b) the importance of careful dieting and control, (c) the importance of knowing the caloric requirements of exercise, be it carried out hourly, daily or weekly, (d) the recognition that despite all efforts ideal control cannot always be accomplished quickly (if the regimen has been followed faithfully, the presence of glycosuria should not cause a guilt complex), (e) emphasis on the ultimate goal of complete control and the need to proceed slowly but as steadily as possible towards it and (f) the avoidance of insulin reaction at all costs and the wisdom of immediate treatment for even the mildest.

In outlining the above regimen, it has not been our intention to afford the physician or the pa-

tient a good excuse for the "sloppy" management of any diabetic state. On the contrary, it is designed to enable a small group of the more severe brittle diabetics an opportunity to remain useful, self-respecting and independent individuals, while slowly achieving good control of the disease.

Addendum
Case Histories

Case 1.—P. W. (Figure 3A and B). This girl, first seen at the age of 7 years and 13 weeks, developed her diabetes at the age of 5½ years, with acute onset associated with coma. It can been seen from Figures 3A and 3B that six months later she went through a period of relatively mild diabetes, requiring only seven units of insulin daily to control her condition, with blood sugar varying more or less in the normal range between 70 and 130 mg./100 cc. During this period the urine was almost continuously free of sugar and acetone, and insulin reactions were not known to have occurred or, if they occurred, were unrecognized.

In the nine months prior to our seeing her the urine sugar and acetone had fluctuated widely, with blood sugar varying from 30 to 430 mg./100 cc. She had been in coma three times, and had suffered from insulin reaction at two-week intervals, on an average. She had had indeed four insulin reactions in the week prior to our seeing her. Regular insulin in dosages from 9 to 30 units daily had been employed in an attempt to control and regulate her condition. Insulin had been given during the preceding several weeks almost entirely on the basis of the individual fractional specimens and therefore had varied from day to day.

On the day preceding our seeing her she had been placed on 12 units of regular insulin and 5 units of PZI. This was continued during the first three weeks of our regimen while daily fractional urines were carried out. During this time, there was a slight reduction in the urinary sugar loss as well as in the blood sugar value. Her general condition remained very much the same; there were no clinical signs of ketoacidosis. The dosage of insulin was raised by four units, namely, to 14 units of regular and seven units of PZI, as a mixture. This was increased three weeks later, with considerable improvement in glycosuria, a slight decrease in blood sugar, but with ketone bodies still appearing occasionally in the urine. During this period, however, she had gained weight.

In view of the changes toward normal and the gain in weight, the insulin dosage was reduced by two units of the long-acting insulin. By the end of four weeks urinary sugar had disappeared, occasionally traces of ketone bodies were present in the urine, and blood sugar still was high. Afternoon headaches were indicative of the fact that the child was having mild reactions which were always relieved by the exhibition of food.

A total reduction of six units in the insulin dosage resulted in an increase in blood sugar and glycosuria, but the disappearance of all traces of acetone from the urine. In order to gain control of the condition it was necessary to increase the insulin dosage by a total of 14 units. At the same time the diet was increased gradually from 1445 to 1860 calories in order to take care of necessary growth requirements.

Some nine months later, in consonance with changes in urinary sugar, the insulin dosage was still further increased by seven units, and thus maintained for nearly five months. At this time the patient was approximately normoglycemic and aglycosuric. Afternoon headaches suggestive of insulin reaction and which were relieved by food occasionally developed. It will be noted that ketone bodies did not appear in the urine, as they had done previously when mild reactions occurred.

From this point forward, the patient remained well controlled and never again required radical variations in her regimen. As she approached puberty and the prepubertal growth spurts began, her insulin requirement increased strikingly, reaching a peak of 50 units at age 11.5 years, at the same time that her catamenia occurred. Neither prepubertal nor postpubertal growth spurts were attended by any untoward event nor by any radical break in sugar tolerance. This patient continued to do well and remained normoglycemic and almost completely aglycosuric on a diet adequate for nutritional needs.

In this case, treatment was directed towards (1) reassurance of the patient and her family, (2) the avoidance of shock and acidosis, (3) changes in the diet necessary to provide adequate growth and (4) education regarding the disease and the goal of eventual good control.

That this slow change towards normal was rewarding is amply illustrated by the fact that this child did not show radical breaks in tolerance or wide fluctuations in blood and urine sugar during the entire period of prepubertal and postpubertal growth. We attributed this to the long period of good control which preceded this period of unusual activity. We think the difference between this patient and the patient in Case 2 illustrates the point admirably.

Case 2.—J. G. (Figure 4). The patient was first seen at the age of 13 years and 2 weeks. Onset of the disease, at age 11, had been rapid. Findings at the time of onset with keto-acidosis are shown in the first column of Figure 4. The second column illustrates conditions as they existed just prior to the time we first saw him, also gives the regimen instituted by us. He was then showing 4 plus sugar and a trace to 3 plus acetone in all fractional urines. Blood sugar was 320 mg./100 cc. In the several weeks prior to our seeing him insulin reactions had been developing three to five times weekly and he had been hospitalized for severe keto-acidosis, with coma, twice in the preceding two years.

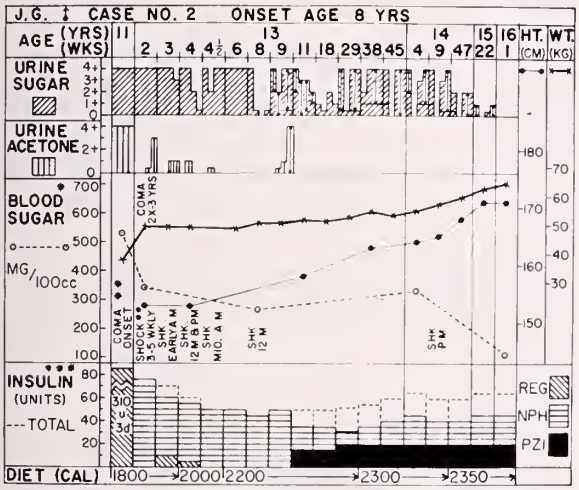

Figure 4. J. G. Case 2—Selections from a continuous record of this patient from 11 to 16 years of age. (See Figure 3 for meaning of asterisks).

While necessary studies were being completed, the patient was maintained on the previously recommended diet (1800 calories) and dosage of insulin (NPH 76 units). At the end of a week, however, he still showed 4 plus sugar in three of the four urine specimens and 1 plus acetone in two. He had had one early morning insulin reaction.

His diet was kept at the same level and his insulin dosage reduced to a total of 70 units, a mixture of NPH 60 units and regular 10 units. Despite the presence of large amounts of sugar in the urine and the occasional appearance of acetone, two reactions occurred during the immediately succeeding week, at noon or in early afternoon. The dose of regular insulin was reduced by one-half. Three days later the patient still was showing large amounts of sugar in the urine and occasional traces of acetone, and had had further reactions in midmorning.

Despite the marked glycosuria, insulin dosage was still further reduced by ten units. Because of steady weight loss, the diet was increased, at first to 2000 calories and later to 2200. On the increased diet and 50 units of NPH insulin daily, acetone bodies disappeared from the urine for two weeks but glucose remained strongly four-plus. In the seventh week of this regimen urinary and blood sugar decreased slightly and reactions appeared at mid-day. The dose of insulin was decreased to 45 units for one week but because glycosuria had markedly increased and acetone had reappeared in the urine, the patient was returned to a dosage of 50 units.

Because the heaviest amount of urinary sugar was showing in the morning, before breakfast, the NPH insulin was replaced by a mixture of NPH insulin and PZI, the total dosage remaining the same as before, 50 units. Minor adjustments in this regimen were made during the ensuing year, with considerable amounts of sugar still showing in the urine and hyperglycemia always present in the two-hour postprandial blood sugar.

It was not until the 24th month after starting treatment that the patient became normoglycemic, but with 0 to 2 plus sugar still occasionally appearing in the urine. From a glance at the height chart, it will be noted that stabilization did not occur until the end of the rapid growth period. The final stabilizing dose of insulin was 65 units, divided between NPH (45 units) and PZI (20 units). The patient was first seen at about the time of puberty and we believe that the major factors causing difficulty in gaining control of the diabetes were related to growth hormone and linear growth.

It will be noted that a studied effort was made to avoid insulin reaction in this case. We have no evidence that the prolonged periods of hyperglycemia and glycosuria adversely influenced his general condition. Admittedly he now is only 24 years old so that we cannot say that atherosclerotic lesions will not develop before the age of 30. His present dose of insulin is 30 units of Lente. His weight is maintained on the diet prescribed in the later years of intensive therapy, namely, 2550 calories. The height finally attained was 180 cm. and the weight 72.4 kg. Throughout college life, he was active both mentally and physically and remained in the upper third of his class. He has continued to handle his diabetes so that good control has been maintained.

Case 12.—M. E., a mechanical engineer, was first seen by us at the age of 28 years. Diabetes of the gradual onset type had developed at age 22. The condition, however, was first recognized and treated when he was admitted to the hospital in coma several months after he had first become aware of weakness, loss of weight, polyphagia,

polydypsia and polyuria. With the precision of a bridge builder and one mechanically trained, he had read prolifically regarding diabetes and was familiar with much of the literature then current. To him glycosuria was a crime. The appearance of sugar in the urine was the signal for an added dose of insulin. He was thoroughly imbued with the thought that diabetes was truly a mathematical disease in which insulin metabolized sugar on a readily calculable mathematical basis. Unfortunately, this concept of precision did not extend to his diet nor to his hours of eating, working and playing. He was most irregular in these matters, firmly believing that the exhibition of insulin could make up for any irregularities of his own indulgence. As well as could be determined, his diet showed wide fluctuation between 2000 and 3300 calories per day and his daily insulin dose between 60 and 120 units.

During the year that we were privileged to observe him, he was in the hospital in diabetic coma on four occasions. He was subject to insulin reaction for from two to five times weekly and, when conscious, steadfastly refused hospitalization or any other logical approach to a solution of his problem. As a result of his extensive reading, he had acquired a fear of overweight. He was afraid of the presence of glycosuria. He was convinced of the efficacy of "covering" glycosuria in the approximate proportion of five units to every plus, with double the amount if acetone also was present. These ideas were fixed, to the point of psychosis of an obsessional type, finally culminating in suicide at the age of 29 years. Such obsessional feelings are shared by many persons with diabetes. Fortunately, most of them outgrow the problem and, with the aid of the physician, work out a satisfactory compromise which eventually leads to reasonably good control.

Case 17.—W. S. The patient, a female, who learned that she had diabetes at age 33, first came under observation at age 38. Scleroderma was first diagnosed at age 35, and was already widespread and far advanced three years later. The diabetes never had been under complete control and never was satisfactorily controlled throughout the eleven years we treated her. She died of cardiac failure associated with the scleroderma, at the age of 49 years.

During her life there were repeated instances of insulin reaction, and repeated episodes of ketosis and keto-acidosis. Oral hypoglycemic agents added to the regimen made her worse rather than better. Her insulin requirements varied from 40 to 150 units daily. At the higher levels of dosage, she was always in danger of reaction. In a single day, she might show one specimen with 4 plus sugar and 4 plus acetone while an insulin reaction could occur ten hours later. Despite a conscientious effort to follow her regimen strictly, and despite meticulous care on our part to alter her program slowly, we never were able to maintain this patient for any length of time as a mild or stable diabetic. This is the only failure we experienced in a cooperative patient. In the two other uncontrolled patients (Cases 6 & 12), reasons for failure were rather obvious.

Case 18.—M. L. (Figure 5). The patient, a male, first seen at the age of 61 years, was found to be a diabetic on routine urine examination at the age of 56. Until age 61, the condition remained mild and easily controlled with a daily diet of 1800 calories and 25 units of NPH insulin. Approximately one year prior to our seeing him, he had undergone transurethral resection of the prostate uneventfully and without any change in insulin dosage or in dietary regulation.

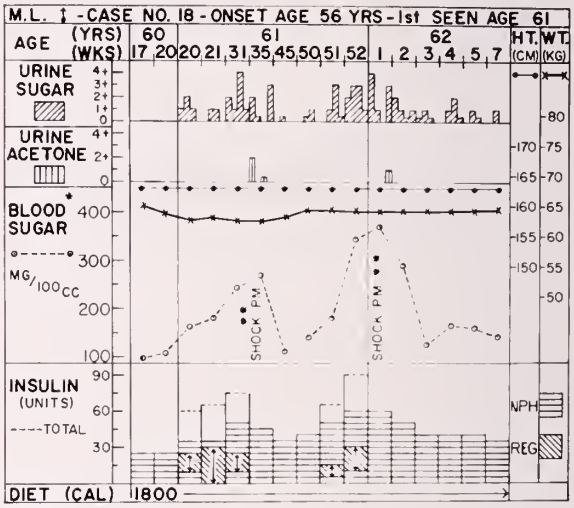

Figure 5. M. L. Case 18—Selections from a continuous record of this patient from 60 to 62 years of age. (See Figure 3 for meaning of asterisks).

Following pneumonia at age 61, he required 35 units of NPH insulin plus "covering doses" of 10 to 25 units of regular insulin in an effort to control glycosuria and hyperglycemia. Over a period of several weeks, however, despite an increase in the dosage of insulin, his glucose tolerance further deteriorated and glycosuria and hyperglycemia increased. Insulin was raised to 50 units of NPH plus "covering doses" of 10 to 25 units daily. On this regimen there was some decrease in glycosuria but blood sugar remained high and ketone bodies appeared in the urine the same day that an insulin reaction occurred, simultaneously necessitating additional food in-

take. With the elimination of covering doses of regular insulin and a gradual decrease in NPH insulin, glucose tolerance again improved. Ten weeks later only traces of sugar appeared in the urine; ketone bodies were absent; blood sugar was 113 mg./100 cc. and the dosage of NPH insulin had been reduced to 35 units daily.

Normoglycemia and aglycosuria were not maintained on this regimen, chiefly, we believe, because of the irregular eating habits of the patient. Six weeks later he was again placed under more rigid scrutiny, intake was more carefully regulated and insulin dosage slowly raised to the level believed necessary for complete control. Again insulin tolerance temporarily deteriorated and despite large amounts of sugar in the urine, shock supervened simultaneously with the appearance of small numbers of ketone bodies. This vicious cycle again was controlled by reducing the daily dose of insulin, eliminating any covering doses, and reestablishing dietary control.

Because of vagaries in eating during the succeeding two years this patient from time to time showed a trace to 4 plus sugar in the urine, associated with hyperglycemia in most blood specimens, while weight fluctuated between 63.5 and 64.5 kg. On three occasions, an attempt was made to gain better control of the condition, despite the patient's frequent dietary excesses. In each instance the sequence of events was the same, as shown in the chart (Figure 5).

It would seem, therefore, in some instances, particularly those in which diet is poorly followed, that any attempt to control glycosuria and hyperglycemia by increasing the insulin dose through the addition of "covering" doses of insulin, triggers a mechanism by which glucose tolerance is decreased rather than increased, which may result in the creation of a brittle state where a stable type of diabetes previously was the case. We believe that this can be avoided by good dietary control and by very gradual change in the insulin dose, more or less ignoring the hyperglycemia and glycosuria temporarily present. These two factors become important only when nitrogen balance appears to be disturbed, as is readily evidenced by progressive loss in weight.

Worthy of His Hire

TRADITIONALLY, physicians have given generously of their services to the needy without pay. This spirit of altruism began centuries ago when charity was primarily the concern of the Church and private citizens. Until quite recently, all that government did for those in financial distress was to provide food and shelter in the "Poor House." Times have changed. While private charity still has its place, government, more and more, has taken over the financial responsibility for the care of the needy. Perhaps this is good, since the taxpayer thus pays his just share for the care of his less fortunate neighbor.

However, in this transition from private charity to public responsibility for society's "cripples," some fuzzy thinking exists. As a relic of the past, there is the idea that the medical profession should continue to furnish its services free to these people. This, the medical profession will continue to do for the needy *individual*. No one will ever suffer lack of medical care from physicians because they cannot pay.

The point is that when government assumes the responsibility for their care, the needy become "wards of the state." Government, at all levels, local, county, state or national, is not in need of charity. Government pays the butcher, the baker, the contractor, the social worker and all others with whom it does business, at the prevailing rate. Only the doctor has been expected to give his services either gratis or for a much reduced fee. It is high time that we physicians called a halt to this pilfering of our services by governmental agencies . . . why should the doctor be short-changed? Like all others who do business with governmental agencies, the doctor is worthy of his hire.—John G. Slevin, M. D., in Detroit Medical News.

Cervical Disc Disease*

Frank M. Hudson, M. D., and J. Speed Rogers, M. D.

Symptoms, principally pain, numbness or weakness, pertaining to the neck and upper extremities are extremely common. In recent years the myelogram has become a substitute for clinical examination but careful study of the signs and symptoms in cervical disc disease still are rewarding. In this paper the observations are summarized from the standpoint of the clinician, to the end that early recognition and accurate diagnosis may lead to early relief of symptoms.

In general, the signs and symptoms of cervical disc disease fall into four groups: (1) those resulting from nerve root compression, (2) those resulting from spinal cord compression, (3) symptoms arising from the degenerated disc itself, the annulus fibrosus and adjacent vertebral structures and (4) those caused by secondary muscle spasm.

The underlying pathology giving rise to the signs and symptoms similarly falls into four groups: (1) unilateral soft, ruptured disc, (2) foraminal "spur" or osteophyte, (3) median, soft, herniated disc and (4) cervical spondylosis: hard, arthritic, ventrally-lying ridges.

The great majority of "disc" problems result from the laterally placed lesion compressing the nerve root. Odom, Finney and Woodhall, in a series of 246 cases of cervical disc disease, reported that 175 were caused by a unilateral, soft, ruptured disc and 46 by a foraminal spur. Of the remaining 25 cases, there were 14 with cervical cord compression from a centrally placed soft disc and 11 with cervical spondylosis. The higher incidence of the lateral herniated disc is attributable to certain anatomical and physiological factors, i. e., the intervertebral disc changes shape in response to motion and stress, and exerts its greatest force against the posterior longitudinal ligament which is weakest at its lateral insertion.

Pain Distribution

Pain in the neck, interscapular region, shoulder and arm, in varying degree, is common in cases of laterally placed disc. Radicular pain from encroachment on a nerve root by a lateral disc or osteophyte usually is characteristic in its distribution, and often the level of nerve root involvement can be predicted on ascertaining the part of the arm, hand or fingers most severely affected, e. g., pain about the deltoid area is a frequent observation in a fifth cervical root lesion, pain along the radial forearm, thumb and index finger in a sixth cervical root lesion, pain into the index and third fingers in a seventh cervical root lesion, while in that of the eighth cervical root, the pain is distributed over the ulnar forearm, hand, and fourth and fifth fingers. Sensory loss of varying degree often follows the same distribution. Paresthesiae (numbness, tingling), which are common, are not always of localizing value but, again, may correspond to the dermatome segment of pain distribution.

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Muscle Splinting

In addition to the limitation of motion of the neck, secondary splinting of muscle groups about the shoulders and neck, particularly the trapezius, may give rise to trigger spots and painful, sensitive areas along the back of the interscapular region. Also, the erector capitae muscles constantly and vigorously contract in attempts to fix the cervical spine and limit motion, resulting in pain and tenderness in these muscles.

Nerve Root Compression

Nerve root compression by a cervical disc is most common at the fifth and sixth and the sixth and seventh cervical levels. Of 100 cases of nerve root compression by a cervical disc, the Mayo group, in 1957, observed that 19 were at the fifth and sixth cervical level, 69 were at the sixth and seventh, 10 were at the seventh and eighth and 2 were at the fourth and fifth cervical level.

Roughly comparable figures are reported by Woodhall and his colleagues, with 24 per cent at the fifth and sixth cervical level and 70 per cent at the sixth and seventh, in their 175 cases

*From the Department of Neurosurgery, The Wheeling Clinic, Wheeling, W. Va.

Submitted to the Publication Committee, June 8, 1961.

of soft, ruptured disc. Their figures for nerve root compression by bony foraminal changes show the majority again to be at the fifth and sixth and the sixth and seventh cervical levels, with 48 per cent at the former and 39 per cent at the latter level. This same group found strong evidence that the incidence of trauma is not high enough to warrant its classification as the primary factor in the various types of ruptured cervical disc, also that when trauma is involved its role is the aggravation of the pre-existing condition or change in the disc substance.

Motor Loss

Motor loss may be overlapping and may vary if the plexus is "pre" or "post" fixed but often is found to corroborate the sensory loss. The sixth cervical root lesion causes loss or impairment of the ability to abduct and externally rotate the arm and to flex it at the elbow. The seventh cervical root lesion typically leads to weakness of extension of the arm at the elbow, to loss of dorsiflexion at the wrist or loss of extension of the fingers. Inability to flex the hand at the wrist and to flex, abduct and adduct the fingers is seen in lesions of the eighth cervical root. With involvement of the sixth cervical root, the biceps reflex is affected while impairment or loss of the triceps reflex results when the seventh cervical nerve root is involved.

Diagnosis

Plain x-ray observations are not reliable with regard to the level of the disc rupture. It often has been shown that a ruptured disc causing clinical symptoms is found (either at operation or on myelography) to be at a different level from that of the disc space narrowing seen on plain x-ray studies.

The clinical diagnosis of a laterally placed ruptured cervical disc is based on the history and symptoms which imply compression of a nerve root and malfunction of the intervertebral space involved. Neurological examination confirms nerve root involvement. Additional observations which are of value in making the diagnosis are limitation of hyperextension of the neck toward the involved side, reproduction of pain by firm pressure on the involved cervical spine and reproduction of symptoms by bending the neck to the involved side, with pressure superimposed on the vertex of the skull (Spurling's test).

Cervical myelography is easily performed, is safe, and is much more accurate than myelography for the lumbar disc. It should be used in all cases before any operative procedure is undertaken.

Pitfalls in Diagnosis: An Alert

There are several pitfalls for which the examiner should be on the lookout in making the diagnosis of laterally placed ruptured disc. The most frequent error seems to consist of mistaking radicular pain in the shoulder and upper arm for a lesion of the rotator cuff or for bursitis of the shoulder. In cervical disc disease there is no localized tenderness about the shoulder and no limitation of passive motion at the shoulder girdle. Conversely, in bursitis and in tendinitis there are no sensory changes nor any numbness, and no limitation of extension of the neck.

Another common source of confusion arises from associated scalene muscle spasm which often is part of the more generalized muscle spasm around the neck and shoulders seen in cervical nerve root compression. Typical symptoms of ulnar paresthesiae, worse with the arms held high and worse on arising in the morning, or interfering with sleep, as well as positive compression testing for scalene spasm (Adson's test), may be seen. In such cases, treatment for the "anterior scalene syndrome" may result in a certain degree of relief of these superimposed symptoms and signs but will not result in lasting or gratifying relief of the more basic problem, i. e., the cervical nerve root compression.

A third source of error is the interpreting of the interscapular sore spot (which actually is referred pain from irritation of the annulus fibrosus or from splinting of muscles to limit motion) as a disturbance arising locally from the underlying dorsal vertebrae or from the back muscles. Again, local treatment such as novocain infiltration or heat or ultrasound to the area of pain referral will result only in transient relief.

Treatment

Conservative treatment for nerve root compression by the laterally placed ruptured disc and the foraminal spur is confined essentially to cervical traction with a head halter. Results obtained by this method are so successful that with its use, operation probably can be avoided in at least 80 per cent of cases. The traction, however, must be properly used as well as augmented by considerable patience and reassurance on the part of the physician.

In using traction, it is important to have the pull equally distributed between occiput and chin and not confined mostly to the chin, as often is the case. In the latter instance, the chin is chafed from friction of the halter and, even worse, the neck is hyperextended, which is the position used to reproduce cervical root pain in the process of diagnosis. There is no merit in the

rigid enforcement of prescribed intervals in the traction apparatus. The patient should learn how to get in and out of the rig by himself, and should be instructed to remove the traction if he feels like it. Overhead traction at home is useful but it is wise to have the patient learn the technique of the method by spending a few days in the hospital under supervision.

If the traction fails to afford relief, or if it aggravates the symptoms, surgical intervention is indicated. Removal of a single, lateral, soft disc is a safe and simple procedure and the results are extremely gratifying.

When symptoms are produced by foraminal encroachment the results of surgical decompression are somewhat less than satisfactory, the reason being that such narrowing often is found in older patients with extensive degenerative disc disease and multiple root involvement. In such cases it is necessary only to unroof the foramen thoroughly and it usually is not essential to remove the bony spur itself. Multiple or bilateral involvement calls for awareness of the stabilizing function of the apophyseal joints (partially destroyed in the unroofing procedure), with removal of a minimal amount of bone at foraminotomy. Extreme awareness of the very real danger of producing spinal instability and possible secondary cord damage also is indicated.

Midline soft rupture, as a rule, is associated with acute trauma and marked neurological deficit from acute cord compression. Prompt recognition and surgical removal may salvage valuable cord function, if skeletal traction alone does not afford decompression.

The "hard" midline disc, variously termed "spondylosis" and "cervical arthritis," is an interesting chapter in itself. The lesion produces cord compression of an insidious type and may give rise to fasciculation in the muscles of the arms and shoulders bilaterally. For this reason, the syndrome may be indistinguishable from the so-called degenerative, intrinsic lesions of the cord, particularly amyotrophic lateral sclerosis and multiple sclerosis. Pain almost always is absent in these cases. When gait disturbance becomes disabling and myelographic study reveals significant anterior compression against the cervical cord, surgical intervention is called for. The operation usually performed at present is the unroofing of the cervical canal over the involved segments, with section of the dentate ligament attachments bilaterally for two or three, or more, segments. In our experience, this procedure never has completely relieved the gait disturbance and pyramidal tract signs but has seemed to halt the process.

Mayfield, of Cincinnati, has had great success by actually removing the midline bony accretions, using a special curet. Cloward, of Honolulu, has reported good results from an anterior approach through the vertebral bodies, using a special drill. Perhaps these procedures will prove to be safe and more effective.

It is strongly urged that any patient who is quadriparetic, with varying degrees of sensory loss, hyperreflexia and bladder impairment, be given the benefit of myelography and, in the case of cord compression, operative intervention, before being dismissed as an example of incurable degenerative spinal cord disease.

Summary

1. The symptoms and signs of cervical disc disease are discussed.

2. Cervical disc as a cause of pain in the dorsal neck or upper extremities, or both, usually may be distinguished from other factors by careful clinical appraisal.

3. In the majority of cases of laterally placed cervical disc, improvement by conservative means is possible. In the remaining cases, surgical intervention provides a gratifying method of relief.

4. In cases of slowly progressive spinal cord changes, cervical spondylosis should be considered thoroughly as a possible cause before the diagnosis of intrinsic spinal cord disease is made.

References

1. Odom, G. L., Finney, W. & Woodhall, B.: Cervical Disk Lesions, J. A. M. A. 166, 23, 1958.
2. Yoss, R. E., Corbin, I. B., MacCarthy, C. S. & Love, J. G.: Significance of Symptoms and Signs in Localization of Involved Root in Cervical Disk Protrusion, Neurology 7:673, 1957.

. . . one can acquire everything in solitude.

STENDHAL.

Special Article

The Problem and the Challenge*

W. W. Barron
Governor of West Virginia

It was with pleasure that I accepted the invitation to meet with the doctors of West Virginia. Although I am trained in law and you in medicine, I feel that we have a common ground in the needs of our people. Growing out of these needs, we also have a shared stake in the plans that community leaders all over West Virginia, representing all walks of life, are now formulating for the welfare and advancement of our State.

I am sure that you are very much aware of the acute personal problems being faced by many of our people as they struggle with economic forces that seem beyond their ability to control. These personal problems involve the inability of a distressing number of families to provide for themselves even the most basic necessities of food, clothing and shelter, to say nothing of medical care. These needy people come to you for illnesses they cannot control or when the conditions under which they are forced to live result in physical illness; they come to me when they identify their problem with the responsibility of state government; they turn to both of us when they are discouraged and disillusioned.

'Caravan of Hope'

Old-fashioned Christian charity is a part of the answer. As individuals, we can and must reach out to help our fellow men in their time of need, without regard to race, creed, color, or economic condition. My "Caravan of Hope" program, in a small measure, provided an opportunity for those of us who have been more fortunate to share the burdens of the less fortunate.

But this alone is not enough. It is not enough because our problems have deeper roots than immediate distress. We are, in a very real sense, a part of our problems, at a time when we would much prefer to be a part of the answer to them. Many of our difficulties stem from what we believe, and what we have learned to expect of ourselves. This is neither a medical nor a legal generalization but it affects both of our professions. I speak to you now of your larger role as community leaders—as molders of public opinion and aspiration.

West Virginia, for too long, assumed that its salvation lay in the exploitation of the natural resources that were here when the first settlers arrived. The fact is we looked to our mountains of coal, our reservoirs of gas, and our timbered hillsides—and that many of these resources are now depleted is not so important as the fact that, in the process, we developed a mind-set of exploitation—of *getting* rather than *giving*.

A companion error in judgment has been the assumption that a future prosperity would somehow derive from inert things, material gain, rather than from the development of our people. The paradox is that by failing to invest in the latter, essentially an educational investment, we denied ourselves the benefit of the former—the standard of living our people rightfully deserve. Today many of our people are looking toward another equally elusive "pot of gold at the end of the rainbow," problem solutions hopefully to be advanced on the state or national level, as opposed to solutions that might otherwise grow from the genuine hopes and aspirations of our local communities.

Using Resources of Modern Technology

If left un-checked, these mind-sets of tradition will divert our energies into channels which are not only futile but disastrous. We must turn our attention to the development of people—intelligent, educated people who know how to use the new resources of our modern technology for their own betterment and for the good of society. We must develop a generation of West Virginians who are proud in self-reliance, rather than defensively proud in poverty.

The Author

- **Hon. W. W. Barron, Governor of the State of West Virginia, The Capitol, Charleston, W. Va.**

*Presented before the 94th Annual Meeting of the West Virginia State Medical Association at The Greenbrier in White Sulphur Springs, August 24, 1961.

This will require, first of all, increased investment in all forms of social service and especially education. It will necessitate, secondly, the reorientation of our many and varied programs of social service to the objective of developing the imaginative and creative capabilities of our people. We cannot hope, nor should we attempt, to restore the "economy of things" that preceded automation.

In the future more and more of our people will follow the national trend of joining the ranks of the social-service professions. The deliberate preparation of people for a productive and happy life in nursing, teaching, social work, government service, and in like pursuits, is just as feasible and just as important as training in the manual and manipulative skills. What we need is an adequate balance of both.

Power of Planning

Throughout our State local communities, the prosperous along with the not-so-prosperous, are discovering the power of planning. My administration is dedicated to the idea that the imagination and intellect of our people can be extended and captured in long-range plans for community improvement which place a higher value on deferred rewards than on immediate satisfactions.

There should not be uniformity in the plans of communities for their own development. Their needs for professional and technical services are markedly different and their plans should reflect these differences. Where we find active, energetic people ready to act, we stand ready to support them, regardless of whether their neighbors have reached this point of advancement. In this manner, the peaks of real progress and achievement in our more advanced communities will challenge and eventually raise the valleys of depression in others.

This is why I have supported the creation of pilot centers of county and community development, each of which may be thought of as a "comprehensive model" of what the future for West Virginia can become. This is the forerunner of planned, rather than accidental, diversity that truly reflects the initiative and vision of the people to whom the fruits of cultural advancement rightfully belong.

The new emphasis in state government is thus on innovation, rather than control and conformity; upon creativity rather than adaptability. New and better answers must be found for the problems that are as old as the race itself, as well as for the problems that are peculiar to our century and our time. Some of these needed answers fall within the province of my responsibility; others fall your lot as leaders in your chosen profession and in your community.

New Concepts, Needs and Opportunities

I am sure that you are acutely aware of the emergence of new concepts, new needs and new opportunities in your own profession. When the new president of the American Medical Association, Dr. Leonard W. Larson, recently noted that "medicine cannot be blind to social change," he, in effect, told the story of American medicine. It is an exciting story of rapid and purposeful change, highlighted by one medical discovery after another.

It is difficult to believe, but true, that most of these advances have taken place during our lifetime. The Flexner Report of 1910 was only the beginning of a trend of professionalization which shortly yielded the discovery of insulin in 1922, of penicillin in 1945, and an endless stream of new knowledge since then—until now UCLA's medical dean, Dr. Stafford Warren, can proclaim that "more medical research has been published since World War II than in all prior history."

This truly remarkable progress was noted earlier by Harvard's late professor, Dr. Lawrence Henderson, when he, in a negative vein, wrote that "not until 50 years ago did a random patient, taking a random disease to a random doctor, have better than a 50-50 chance of benefitting by the encounter."

'More Expensive But a Better Buy'

Time magazine, in a recent issue, concluded that the social consequence of these wholesale advances is that "modern medicine is more expensive but a better buy, with more certain diagnosis, routine complex surgery, and virtually sure-cures for many ailments."

Now, here is where the problem comes. Medicine undoubtedly is a better buy, but at least in West Virginia too many people find that they are unable to buy the improved product. The problem must not be confined to our boundaries, however, because, again according to *Time* magazine, "to improve the distribution of good treatment, medicine is in a state of headlong change . . . from stressing the general practitioner and his elastic fee, to stressing group practice by specialists with costs pre-paid."

As a layman, it occurs to me that this trend toward medical teamwork, with a companion reduction of financial pressure on the patient, may be "good medicine" as well as "common sense." It is entirely possible that specialization in your profession would have alone triggered this trend toward cooperative medical services even in the absence of the crisis of rising costs.

I am convinced that in this time of a rising quality in medical services, and the logical increase in public demand for them, that laymen and practitioners share one common goal—the extension of the services of modern medicine to all of the people who need and can benefit by these services. The basic problem in the achievement of this goal is probably more administrative than medical. The solution for West Virginia has not yet been invented. It is my sincere hope that the needed invention will come from the medical profession itself and that state government will need only to remain in an active supporting role.

A Plan for West Virginia

I, therefore, challenge you to review all of the alternatives—from the experience of the Palo Alto Clinic, to Henry J. Kaiser's medical care program, to New York's health insurance plan—and then to come up with a plan uniquely designed to meet our needs here in West Virginia.

There is a direct parallel to the medical problem and our Emergency Employment Program in West Virginia. For example, we can give our displaced workers emergency jobs, but this will not make them more employable unless we plan beyond the present crisis. You can extend your services on a charitable basis to the needy but this too will fall short of the mark. Thus, we need a plan for medical services which will be equally advantageous to the practitioner and to the patient, and which will not threaten the individuals' dignity with the prospect of either poverty or charity. Others have found a way and so can we.

I indicated earlier that communities all over West Virginia are now formulating ingenious self-help plans. I now invite you to add the new and needed dimension of improved medical care, on an experimental basis, to one or more of these larger development plans. We are badly in need of the creative contribution of which your profession has so ably and convincingly demonstrated that it is capable of exerting. If you can see fit to join us in this worthy enterprise, I feel confident that not only the medical profession but the people as a whole will benefit.

In any event, I here now pledge to you my full support and cooperation.

A Worth-While Service

EVIDENCE that heavy cigaret smoking is a casual factor in cancer of the lung is strong, even though there are other factors. Lung cancer is perhaps less important, however, than other diseases related to smoking. Although it has a discouragingly high death rate, it involves far fewer people than emphysema, chronic bronchitis, and cardiovascular maladies, conditions that make thousands of chronic cripples. These diseases are much more subtle than lung cancer, usually requiring a long time before they are fully manifested. Insidious decreased discriminatory sensation of finger tips; increased sensitivity of fingers, hands, and feet to pain, heat and cold; bizarre abnormalities of the finger nails can often be traced to excessive cigaret smoking and nicotine effect on the peripheral vascular system.

Shortness of breath on exertion—even the exertion of sustained speaking in normal conversation—chronic coughing with its blast effect on alveoli, sinus drainage, altered taste and smell appreciation: all are aggravated by tobacco smoke, especially that of cigarets.

Prevention is more effective than cure. If these manifestations of tobacco poisoning can be eliminated by removal of the cause, then many cases of crippling from pulmonary and cardiovascular disease can be prevented.

Long-time heavy smokers usually are not responsive to advice to quit smoking. However, a constant and widespread warning to school children from elementary grades through high school will pay off. Physicians can thoroughly, honestly, and frankly discuss with young people the real danger of future impairment to their nervous, pulmonary, and cardiovascular systems if they become heavy cigaret smokers.

It is hard to conceive of a better service physicians might give.—Delphin von Briesen, M. D., in Texas State Journal of Medicine.

The President's Page

The Fight Can Be Won

To those of you who had time to reflect during our recent annual meeting at White Sulphur Springs, it no doubt seemed incongruous that, amidst the grandeur of our West Virginia hills and the beauty of the hotel with its meticulously maintained grounds, there could be other than relaxation and good fellowship. It was difficult not to succumb to the spell so woven, and just lean back and enjoy the gracious hospitality so characteristic of The Greenbrier. Many did, but others felt a restless compulsion to keep on the move. As I talked to one of my colleagues today and asked him how he had enjoyed his stay at The Greenbrier, he told me there always seemed to be a "slight rumbling," the nature of which he couldn't determine. There seemed to be an undercurrent of uncertainty, an indefinable anxiety that so often we sense before we realize from whence it comes.

What was this "slight rumbling," this sense of uncertainty and anxiety? What was it with which we were confronted? What was unusual about this? Are we not all products of our age, where anxiety is a way of life?

I believe it is because we are in a battle. Many of us are confused because we don't know who we are fighting or how the war started. Yes, we are in a battle and because we are on a battlefield does not mean that we started the war. The medical profession has always been the prime target for pseudo-social planners, not because we are rich and powerful, as some would have the world believe, but rather because our training and professional insight represent the greatest threat to social ideologists. Unless the medical world can be made a slave to socialism, the adversaries of individuality have lost their war before it even gets going.

Medicine is the most intensely independent profession in the world. It rests upon the foundation of individual integrity, individual enterprise, individual initiative and perhaps too often individual action.

To allow the world to view this battle as the "doctors' fight" is to succumb to the oldest strategy in the world—divide and conquer. This war is not just our battle but "total warfare." The cult of collectivism seeks through legislative action to socialize American medicine. If this is achieved, can we imagine that they will be content and cease in their efforts? The same situation would follow in industry and labor, in education, in religion and even in social life. We therefore have many allies and we must seek them out. They are all about us, if only we will carry the message to them. Furthermore, if this is war, we must plan our campaign with a burning desire to win, not merely this battle with which we are now confronted, but the whole struggle.

Who is our enemy? The enemy is the idealistic social planner who feels that security can only be found by submerging the ceaseless striving of individual intelligence and ambition to give birth to a formless conglomerate. This is done because they mistrust the intelligence of the average American citizen. They feel in their egotistical minds that our fellow countrymen cannot care for themselves. What they do not understand, is that when they legislatively rob men and women of freedom of choice they are taking away one of our most precious heritages.

Where will the battles be fought? The battles will be fought in the minds of our citizenry. Our enemies, as well as the enemies of our allies, have been doing this for decades with platitudes and promises, with which they have swayed our fellow Americans from the pathways of free human enterprise. To overcome the propaganda of the "false prophets" and cure the cancer of conformity, there must be instituted a program of re-education of the American people.

Who is to fight our battle? Are we to employ mercenaries? Is it the job of the American Medical Association? Definitely not. Victory can only be accomplished by overcoming inertia and defeatism by an upsurgence of leadership in each individual physician. As Dr. Leonard W. Larson, President of the American Medical Association, said in a recent speech in Chicago, "We must give ourselves." One hundred and eighty thousand physicians with their many allies can form an educational cadre with which we can convince millions that they have been indoctrinated with a false philosophy.

Now is the time! It is later than you think.

D. E. Greeneltch, M. D., President

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EDITORIALS

A SUCCESSFUL ANNUAL MEETING

The 94th Annual Meeting of the West Virginia State Medical Association came to a fitting close on Saturday evening, August 26, with a stirring address by the medical profession's leading spokesman, Dr. Edward R. Annis of Miami, Florida. More than 275 persons attended the Presidential Dinner and heard Doctor Annis call upon physicians and their wives to wage a vigorous campaign to preserve the freedoms of medical service in America.

We are indebted to Doctor Annis for his taking time out from a busy schedule to fly to White Sulphur Springs for an appearance before a most enthusiastic and receptive audience. His message was inspiring and we hope that it will be our good fortune to have him with us again in West Virginia in the near future.

Another feature of the dinner that evening was the presentation of Presidential Citations to 23 state physicians who were honored for "outstanding public service, outside the practice of medicine, to your community and West Virginia." The citations were presented to the physicians by Dr. John W. Hash, the retiring president.

A few hours earlier Dr. D. E. Greeneltch of Wheeling was installed as President of the State Medical Association at the final session of the House of Delegates. Doctor Greeneltch, who is a native of Ohio, has served as Chief of the Department of Anesthesiology at Ohio Valley General Hospital in Wheeling since the completion of his residency training in 1938. He was certified by the American Board of Anesthesiology in 1941.

Doctor Greeneltch has been active in organized medicine for more than 20 years and is

D. E. Greeneltch, M. D.

eminently qualified for the office of president of the State Medical Association. He served terms as secretary and president of the Ohio County Medical Society and was a member of the Association's Council for three years. He was elected vice president in 1959 and president elect in 1960.

The new president is fully aware of the many personal sacrifices a physician must make upon elevation to the presidency of a medical organization. During his first month in office, Doctor Greeneltch spent several days in Chicago attending a meeting called by the American Medical Association, represented our Association at an annual meeting of one of our neighboring state associations, and paid official visits to several of the component societies.

We greet Doctor Greeneltch as the new president of the Association, and pledge to him our support and cooperation in the months ahead.

To his predecessor, Dr. John W. Hash, our heartfelt thanks for a "job well done." He has guided us loyally and efficiently through an eventful year which has, in his own words, "been fraught with crises."

Doctor Hash has won many friends for the medical profession in West Virginia and we are fortunate in that he will continue to provide competent leadership as Chairman of the Council during the coming year.

THE MAA PROGRAM

Elsewhere in this issue (Page xlix) will be found a Letter to the Editor from Dr. James S. Klumpp, Chairman of the Medical Economics Committee, relative to the MAA situation in West Virginia. To paraphrase what Bacon said of a good book, this letter should be "chewed and digested" by every doctor of medicine in West Virginia. It presents the salient features of the MAA law and regulations as discussed at the recent Annual Meeting.

Neither the law nor the regulations are ideal by any manner of means, especially the prescription forms and the limitations on prescribing of drugs. However, we urge all doctors to comply with both law and regulations until Doctor Klumpp and his Committee can effect some changes in the regulations which will benefit the patients and make the current restrictions more tolerable to the profession.

The basic principles of the Kerr-Mills law are sound, just and workable and it is up to medicine as a profession and each individual doctor, to live up to them until they are legally changed.

DRUG PRICES

While every one admits that the price of drugs is, in many instances, high, this is not entirely a modern phenomena. In the reign of James I, England went through some such an era of costly pharmacy. Certainly the pharmaceuticals of today are better and more effectual in the amelioration of suffering and the cure of disease than at any time in the world's history. Drugs cost more, but they are actually worth much more than at any time heretofore.

We trust the Congress has gumption enough not to approve some of the ideas of the coonskin crowned Senator about drug patents. To do so would only sound the death knell of pharmaceutical research. The Senator's ideas about lack of competition are not factual; he simply doesn't know what he is talking about. Those of us on the firing line who have almost to beat off detail men with a stick three or four times a week know better, but unfortunately the laity do not see this phase of the situation.

His plan to make a Federal bureau the judge of efficacy is nonsensical. The clinician at the bedside is the one to determine efficacy. The politically climbing Senator would lodge too much autocratic power in a Washington bureau which might become dictatorial.

One of the most sensible statements we have seen anent this subject is an editorial from the pen of Dr. Homer B. Martin in a recent issue of *The Journal of the Kentucky State Medical Association* which is so apropos that we quote it entirely:

"Physicians were not exempt from sharing the general confusion attending the Kefauver drug hearings. The witnesses presented views so extreme and opinionated to make them of little help in establishing a reasonable understanding. According to Senator Kefauver, his two years of work uncovered evidence of exaggerated advertising of new drugs, unacceptable promotional activities and a lack of competition in the industry leading to high costs.

"He has, therefore, introduced the following legislation to correct these flaws: limitation of patent rights to three years, insistence on generic name prescribing, the licensure of manufacturers who will be under constant investigation.

"Senator Kefauver is but one problem confronting the drug industry. Their greatest concern is a medical one—productive lines of research. This is the lifeline of their business. Only one product in 2,865 research trials will produce a marketable substance. Once discovered, it must be proven, submitted for government approval, put into production, distributed and reach the market be-

fore competitor products. If it is to be profitable, it must be a truly new product and not merely molecule manipulation of old ones.

"In addition to this, international trade has brought foreign products to the corner drug store. Competition was intensified further when proprietary houses invaded the ethical field. Approaching the physician with products has become more involved since the number of detail men and mailing devices have reached the point of diminishing returns.

"Senator Kefauver proved only one point conclusively: some advertising procedures were unwise. Other than this, the drug industry may claim no unique features but resembles other large businesses in all respects. The one concrete result from the investigation so far has been to complicate detailing procedures and thereby increase expenses without any real benefit being obtained. Evidently the Senator is a strong advocate of private enterprise so long as it is under rigid government control.

"Undoubtedly the drug investigations have been of greatest value to the designers of the welfare state who have limitless governmental financing to carry on a perpetual propaganda program for free medical services. Our most recent reward from governmental agencies for providing the best medical care and drug research in history has been a manifest contempt for the positive programs put forth by the medical association even reaching the point of spending tax funds to establish cultist 'hospitals'. If we tolerate such niggardly treatment, we deserve the consequences."

METABOLISM RESEARCH AT THE UNIVERSITY MEDICAL CENTER

The School of Medicine and Hospital of West Virginia University has been awarded a substantial grant by the Institute of Arthritis and Metabolic Diseases of the National Institutes of Health of the United States Public Health Service. The sum of $151,950 is to provide support until September 30, 1962. Contingent upon congressional appropriation, the National Institutes of Health has committed additional funds in the amount of $541,853 during the period between October 1, 1962 and September 30, 1966. The School of Medicine and the Hospital, therefore, may anticipate the availability of $693,803 for expenditure in metabolic research during the next five years. This is indeed a substantial grant.

The studies made with this grant will be interdisciplinary in nature. Edmund B. Flink, Ph. D., M. D., Professor and Chairman of the Department of Medicine, is the principal investigator, and Bernard Zimmermann, Ph. D., M. D., is principal co-investigator. Nine additional members of the full-time clinical faculty of the School will be directly concerned with the researches at the onset. A number of the present members of the departments of medicine and surgery have previously manifested interest in metabolic research problems.

Through the support provided by the grant, additional personnel including highly trained and skilled research fellows, dietitians and research technologists will be employed. Important research equipment and supplies to aid in the research will also be secured with funds from the grant.

Although grants from the National Institutes of Health, and grants from other sources as well, are a great asset to the budget of the Medical Center and Hospital, money so allotted can be used only for research (and in some instances for training in research). It must be emphasized that these grants cannot be construed as replacing the need for basic financial support from the State.

It is heartening, indeed, to know that the Medical Center will be in a position to contribute to the advancement of knowledge in problems related to metabolism. It is a splendid example of how well-recognized personnel attract financial support for their research and scholarly efforts.

To Perpetuate The Profession

The biggest problem facing American medicine is not nationalization or the final defeat of this or that disease; it is perpetuation of the profession as a virile, progressive force in the American community. The medical profession is losing ground by default because its distribution system has broken down—and, worst of all, its numbers are dwindling in proportion to population.

The No. 1 order of business for all of us in the months and years ahead should be to try our level best to interest the top young persons whom we know personally in becoming doctors. This will be no easy task; on the contrary, it will be for many the most challenging ever faced. It cannot be approached superficially—a word to a father here, a desultory pitch over the bridge table there. It means getting on the same level with the youngsters, talking earnestly and convincing them that being a doctor can be just as thrilling as launching a missile or working at a laboratory bench.

To do this, we must take stock of our new practices, review them for the high spots and the low, and pick out the drama in our daily work. Such an appraisal not only will afford ammunition for selling the medical profession, but might also give us a personal lift, a new-found sense of purpose and worth.—James D. Murphy, M. D., in Texas State Journal of Medicine.

GENERAL NEWS

Dr. D. E. Greeneltch New President Of State Medical Association

Dr. D. E. Greeneltch of Wheeling was installed as President of the West Virginia State Medical Association by Dr. Leonard W. Larson, President of the American Medical Association, at the final session of the House of Delegates during the 94th Annual Meeting at The Greenbrier on Saturday afternoon, August 26.

He succeeds Dr. John W. Hash of Charleston, who automatically becomes Chairman of the Council.

Dr. D. E. Greeneltch of Wheeling, center, was installed as president of the West Virginia State Medical Association by Dr. Leonard W. Larson, right, president of the American Medical Association. He succeeds Dr. John W. Hash, left, who will serve as chairman of the Council during the coming year.

Doctor Greeneltch served for three years as a member of the Council and was elected vice president in 1959, and president elect in 1960.

Dr. L. J. Pace Named President Elect

Dr. L. J. Pace of Princeton, who was named vice president in 1960, was named president elect and he will be installed as president at the 95th Annual Meeting at The Greenbrier in August, 1962.

Dr. Charles L. Goodhand of Parkersburg, who has served for the past three years as a member of the Council, was elected vice president. He also served during the past year as chairman of the Public Service Committee.

Dr. Daniel N. Barber of Charleston was reelected treasurer, a post he has held since 1958.

Dr. J. C. Huffman of Buckhannon, who has served during the past year as Chairman of the Council, will serve as Councillor-at-Large during the Association year 1961-62.

Two New Members of the Council

Two new members of the Council were elected as follows:

Dr. John E. Echols of Richwood (third district), and Dr. Richard W. Corbitt of Parkersburg (fourth district).

Doctor Echols succeeds Dr. C. R. Davisson of Weston, who served two terms and was not eligible for reelection. Doctor Corbitt was elected to serve the unexpired term of Doctor Goodhand, who was named vice president.

Council Members Reelected

Five members of the Council were reelected to serve terms of two years. They had served but one term and were eligible for reelection. They are as follows:

Dr. Richard E. Flood of Weirton (first district); Dr. J. C. Pickett of Morgantown (second district); Dr. Albert C. Esposito of Huntington (fourth district); Dr. Harold Van Hoose of Man (fifth district); and Dr. Clyde A. Smith of Beckley (sixth district).

Hold-Over Members of Council

Hold-over members of the Council who will serve during 1961-62 are as follows:

Dr. Paul P. Warden of Grafton (first district); Dr. S. Elizabeth McFetridge of Shepherdstown (second district); Dr. Richard V. Lynch, Jr., of Clarksburg (third district); Dr. Ward Wylie of Mullens (fifth district); and Dr. T. P. Mantz of Charleston (sixth district).

Doctor Holroyd Reelected AMA Delegate

Dr. Frank J. Holroyd of Princeton was reelected AMA delegate from West Virginia, an office he has held since 1952, and Dr. Thomas G. Reed of Charleston was renamed AMA alternate. Each will serve another two-year term beginning January 1, 1962. Dr. Charles A. Hoffman of Huntington is the hold-over AMA delegate and Dr. J. C. Huffman of Buckhannon, the hold-over alternate.

New President Native of Ohio

The new president, Doctor Greeneltch, was born at Barnesville, Ohio, son of Claude E. and Blanche Hall Greeneltch. He attended various primary schools in Ohio and was graduated from high school in Quaker City, Ohio. He received an A. B. degree from Ohio

State University in 1929 and had postgraduate work in bacteriology and chemistry.

Doctor Greeneltch received his M. D. degree from the University of Louisville School of Medicine in 1935. He is a member of Phi Chi medical fraternity and Alpha Omega Alpha, honorary medical fraternity. He interned and served a residency in anesthesiology at Louisville General Hospital, 1935-38.

He has served as Chief of the Department of Anesthesiology at Ohio Valley General Hospital in Wheeling since 1938. He was certified by the American Board of Anesthesiology in 1941.

Doctor Greeneltch served two terms as secretary of the Ohio County Medical Society and a term as president, 1946-47. He has also served as secretary-treasurer and president of the Fort Henry Academy of Medicine.

He served for three years as a member of the Council of the West Virginia State Medical Association. He was elected vice president in 1959 and president elect in 1960. He will serve as president until his successor is installed on the final day of the Annual Meeting in August, 1962.

He married the former Dorothy Grayce Walter of Wheeling, and they have three children, Margaret Ann, age 20, Delmas E. Jr. (Ned), age 17, and Carla Gail, age 14.

Mrs. Greeneltch, who was graduated from the Ohio Valley General Hospital School of Nursing, is a Past President of the Woman's Auxiliary to the West Virginia State Medical Association.

Program Committee for 1962

Dr. Halvard Wanger of Shepherdstown has been named by Dr. D. E. Greeneltch of Wheeling, president of the State Medical Association, as chairman of the committee which will arrange the program for the 95th Annual Meeting at The Greenbrier in White Sulphur Springs, August 23-25, 1962.

The other members of the committee are Drs. George P. Heffner of Charleston and Charles D. Hershey of Wheeling.

The President Elect

The president elect, Dr. L. J. Pace of Princeton, is a native of Harrisonburg, Virginia. He was graduated from the University of Virginia and received his M. D. degree from the University of Virginia School of Medicine in 1934.

He served an internship and had residency training at the University of Virginia Hospital, 1934-37, and was licensed to practice in West Virginia in 1937. He served with the Medical Corps of the United States, Army, 1942-46.

Doctor Pace served two terms as a member of the Council of the West Virginia State Medical Association and was named vice president in 1960. He will serve as president elect during the current Association year.

Resolutions Adopted During Meeting

The Committee on Resolutions held an open hearing on two resolutions lodged with the executive secretary at least two weeks prior to the first day of the meeting. The meeting was held on Thursday afternoon, August 24, and was attended by several interested physicians in addition to the members of the committee.

The report of the committee, which appears elsewhere in this issue of *The Journal*, includes the resolutions as introduced and a report of the action thereon by the House of Delegates. One of the resolutions calls for the establishment of a Medical Examiner's System in West Virginia, and the other is concerned with the Medical Aid for the Aged Program in West Virginia.

A third resolution concerning exiled Cuban physicians, introduced by unanimous consent at the final session of the House, also was adopted. Three courtesy

Governor W. W. Barron was an honor guest and delivered an address at the first general session on Thursday morning, August 24. Left to right, Dr. Walter E. Vest of Huntington, a past president; Governor Barron; Dr. Halvard Wanger of Shepherdstown, chairman of the Program Committee; and Dr. John W. Hash of Charleston, immediate past president.

resolutions offered by Dr. James S. Klumpp were adopted unanimously.

Action on Proposed Amendments

The following amendment to Article IX of the Constitution, proposed in 1960 by Dr. J. P. McMullen of Wellsburg, was adopted unanimously by the House of Delegates at the first session on Wednesday evening, August 23:

Sec. 3—Amend the Section in line one by deleting the word "President."

(The effect of the amendment eliminates the necessity of electing a president at each annual meeting. Section 2 of Chapter VI of the By-Laws provides that the president elect shall be installed as president as the final order of business at the last session of the House of Delegates at each annual meeting).

Several important amendments to the By-Laws were adopted and are reported in detail in a separate news article elsewhere in this issue.

Neighboring State Presidents Attend Annual Meeting

The presidents of the medical associations of the neighboring states of Ohio, Pennsylvania and Maryland were among the honor guests at the 94th Annual Meeting at The Greenbrier in August. The following physicians, all of whom were accompanied by their wives, attended the meeting:

Dr. George W. Petznick of Shaker Heights, Ohio, president of the Ohio State Medical Association; Dr. Thomas W. McCreary of Rochester, Pennsylvania, president of the Pennsylvania Medical Society; and Dr. Howard F. Kinnamon of Easton, Maryland, president of the Medical and Chirurgical Faculty of the State of Maryland.

Memorial Service

During the first session of the House of Delegates Dr. George F. Evans of Clarksburg conducted a service in memory of Charles Lively, who served as executive secretary of the State Medical Association from 1942 until his death on June 12, 1961.

Addresses by Drs. Hash and Larson

Dr. John W. Hash of Charleston, the retiring president, delivered his Presidential Address at the first session of the House of Delegates. The president of the American Medical Association, Dr. Leonard W. Larson of Bismarck, North Dakota, was the guest speaker at the final session of the House of Delegates on Saturday afternoon.

The complete text of Doctor Hash's address appears elsewhere in this issue of *The Journal*, beginning on Page 355. Doctor Larson's address will appear in the November issue.

Address by Governor Barron

Governor W. W. Barron was the first speaker at the opening session on Thursday morning, August 24. His address appears elsewhere in this issue, beginning on Page 371.

Medical Scholarship Award to Clare D. Edman

Clare D. Edman of Parkersburg was introduced by Dr. J. P. McMullen of Wellsburg, Chairman of the Medical Scholarships Committee, as the recipient of the 1961 medical scholarship award.

Mr. Edman is the fourth student to receive a medical scholarship under the program which was inaugurated in 1958. The other three scholarship winners were Larry Hemmings of Charleston in 1958, Terry T. Tallman of Alma, Tyler County, 1959, and Glenn Buchanan of Gilbert, Mingo County, 1960.

Doctor McMullen reported that the three students are doing well in the School of Medicine. He further reported that Larry Hemmings will be among the first students to receive M. D. degrees at commencement exercises next June.

1962 Meeting at The Greenbrier

Prior to adjournment on Saturday afternoon, the House of Delegates voted unanimously to return to The Greenbrier for the 95th Annual Meeting in 1962. The Council fixed August 23-25 as the date for the coming year.

Dr. Myer Bogarad of Weirton, West Virginia's "General Practitioner of the Year" for 1961, is introduced by Dr. John W. Hash during the final session of the House of Delegates on Saturday afternoon, August 26.

Attendance Figures

The total attendance at the meeting was 756, which compares with 805 in 1960. The physician registration was 472 as compared with 449 last year. The Auxiliary registration was 198 and the total registration for exhibitors and other guests was 86.

W. Va. TB and Health Assn. Meeting In Elkins, October 11-12

More than 150 persons are expected to attend the 41st annual meeting of the West Virginia Tuberculosis and Health Association which will be held at the Tygart Hotel in Elkins, October 11-12.

Dr. H. Stuart Willis of Chapel Hill, North Carolina, Superintendent-Medical Director of the North Carolina Sanatorium System, will present a paper before a meeting of the West Virginia Trudeau Society on Wednesday morning, October 11.

Dr. Willis, who is president of the National Tuberculosis Association, will discuss "The Hospital or Home Care of the Tuberculous."

Dr. Herbert E. Warden, Associate Professor of Surgery at the West Virginia University School of Medicine, will be the speaker at a luncheon on Wednesday. His subject will be "Newer Advances in Chest Surgery."

Doctor Andrews to Present Paper

Dr. Charles E. Andrews, Associate Professor of Medicine at the West Virginia University School of Medicine, will be the speaker at a dinner meeting on Wednesday. Doctor Andrews is the professor for the Tuberculosis Association's Chair of Pulmonary Diseases which was established at the Medical Center earlier this year.

Panel Discussion on Respiratory Diseases

Dr. Ralph H. Nestmann of Charleston will serve as moderator for a panel discussion on respiratory diseases Thursday morning, October 12. The members of the panel and their subjects are as follows:

Dr. Charles E. Andrews of Morgantown, "Pulmonary Emphysema"; Dr. Richard V. Lynch, Jr., of Clarksburg, "Pneumonia"; Dr. Roger E. Wilcox of Beckley, "Carcinoma of the Lungs"; and A. M. Benshoff, Jr., of Ronceverte, "Chronic Bronchitis and Bronchiectasis."

The meeting will close with the general business luncheon on Thursday, October 12.

Caleb Fiske Prize

Trustees of the Caleb Fiske Prize of the Rhode Island Medical Society have announced two subjects for this year's dissertation open to any doctor of medicine in the nation for which a cash prize of $500 will be awarded. The subjects are: "Recent Advances in the Treatment of Malignant Disease," and "Current Status of Cardiac Surgery."

The essays should not exceed 10,000 words, and must be submitted by December 11 to the Secretary, Fiske Fund, Rhode Island Medical Society, 106 Francis Street, Providence 3, Rhode Island.

Doctor Evans Reappointed to MLB

Dr. George F. Evans of Clarksburg has been reappointed by Governor W. W. Barron as a member of the Medical Licensing Board of West Virginia for the five-year term ending June 30, 1966. He has been a member of the Board since 1949.

Charles Lively Memorial Scholarship Fund

During the second session of the House of Delegates, an amendment to the By-Laws was unanimously adopted designating the existing medical scholarship fund as "The Charles Lively Memorial Scholarship Fund of the West Virginia State Medical Association."

This action was taken following the presentation of a memorial resolution offered by Dr. Andrew E. Amick of Lewisburg, a past president of the Association. Mr. Lively served as Executive Secretary of the Association from 1942 until his death on June 12, 1961. The resolution follows:

An Immortality of Love

Our Association should accept the High Honour to establish The Charles Lively Memorial Scholarship Fund of the West Virginia State Medical Association.

You all will agree with me that few men, If Any, has had as fine an influence on our profession as the late Charles Lively.

It now behooves us to keep his Faith and Spirit marching on.

Many beautiful words have been written-and spoken. We have all been made heavy-hearted. So, let's now unite in holding fast to the costly Gift of a Living Faith.

Thus a monument—more lasting than bronze or granite—will project our loyalties, our convictions, our devotions on into the lives of worthy girls and boys who today are dreaming of the opportunity to serve humanity in the role of physician.

The Goal of our Association is ever to have a potent role in the making of a better world—hope where there was despair. Thus in such a Living Monument we will fulfill his career of triumph and influence.

Frank E. Bunts PG Course In Cleveland, Oct. 18-19

A Postgraduate Course on "Selected Topics of Hematology" will be offered by the Frank E. Bunts Educational Institute, which is affiliated with the Cleveland Clinic Foundation. Dates for the two-day meeting are October 18-19.

The course will be presented by staff members of the Cleveland Clinic Foundation, assisted by several guest speakers. The registration fee is $30 and registrations will be limited to 125. Acceptances will be made in the order of application and interns and residents will be admitted without charge.

Further information may be obtained by writing Dr. Charles L. Leedham, Director of Education, The Frank E. Bunts Educational Institute, 2020 E. 93rd Street, Cleveland 6, Ohio.

Important Amendments to By-Laws Adopted by House of Delegates

Several important amendments to the By-Laws of the West Virginia State Medical Association were adopted by the House of Delegates during the final session on Saturday afternoon, August 26.

The amendments were offered at the first session on Wednesday evening, August 23, by Dr. Buford W. McNeer of Hinton, chairman of the Committee on Constitution and By-Laws; Dr. Charles A. Hoffman of Huntington, chairman of the Insurance Committee; and Dr. J. P. McMullen of Wellsburg, chairman of the Medical Scholarships Committee.

Increase in Dues of Active Members

Dues of active members were increased from $35 to $38 per annum as a result of the adoption of an amendment to Chapter I, Section 6 of the By-Laws. The additional $3 will be earmarked for the medical scholarships fund to provide another annual four-year scholarship for a student enrolled in the first-year class at the West Virginia University School of Medicine. The Association has awarded one scholarship per year since the program was inaugurated in 1958.

The delegates also adopted an amendment to the above amendment designating the existing medical scholarship fund as "The Charles Lively Memorial Scholarship Fund of the West Virginia State Medical Association."

Effective January 1, 1962, six dollars of the annual dues of each active member will be earmarked for the medical scholarships fund.

New Committees Named

Three new standing committees and a sub-committee to an existing committee were provided for in the adoption of the following amendments to the By-Laws:

(1) Amend Chapter VIII, Section 1, By-Laws, as follows: Add "Committee on Nominations" to list contained in that Section.

(2) Amend Chapter VIII, Section 5, By-Laws, as follows: The Committee on Nominations shall be appointed prior to the adjournment of the first meeting of the House of Delegates at the Annual State Convention and shall consist of the senior councillor in point of service from each Councillor District, together with the current Councillor-at-Large, who shall act as chairman. This Committee shall consider and recommend to the House of Delegates, prior to the election of officers, in its final session, its nominee for the office of president elect, vice president, treasurer and the AMA Delegate and Alternate. Nothing in this Section shall serve to prevent any nominations from the floor for these respective offices.

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(1) Amend Chapter VIII, Section 1, By-Laws, as follows: Add "Committee on Military Medical Affairs" to the list contained in that Section.

(2) Amend Chapter VIII, Section 5, By-Laws, as follows: This Committee's duties and responsibilities shall, at the state level, correspond to those of the same committee which is a part of the Council on National Security of the American Medical Association. The Committee shall maintain liaison with all branches of the Armed Services through the Department of Defense, and with the Selective Service System, in all matters pertaining to medico-military activities concerned with, and affecting the members of this Association. The Committee shall at proper intervals report its actions and recommendations to the President and to the Council.

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(1) Amend Chapter VIII, Section 1, By-Laws, as follows: Add "Committee on Budget and Personnel" to list contained in that Section.

(2) Amend Chapter VIII, Section 5, By-Laws, as follows: This Committee shall consist of three members, appointed by the President for terms of one, two and three years each. At the end of the first year, and thereafter each year, the President shall appoint one member for a term of three years. This Committee shall be charged with the responsibility of setting up an annual budget, together with suggestions regarding salary schedules for all employees of the headquarters staff. The Committee shall consider and recommend to the Council fringe and retirement benefits, and other matters pertaining to the welfare of headquarters staff personnel. The Committee shall report at regular intervals to the Council through the President of the Association. No action of this Committee shall in any way infringe upon the responsibilities or prerogatives of the President of this Association.

Amend Chapter VIII, Section 5 (e). By-Laws, by the addition of the following:

The President shall appoint a sub-committee of four members, which, together with the Chairman of the Insurance Committee, serving as chairman of said sub-committee, shall have the following prescribed qualifications and duties:

(a) The appointees shall be men of sufficient knowledge and experience in investment, trust and insurance matters to insure the capable and proper supervision over a program intended solely for the purpose of providing a retirement investment fund, a retirement insurance program, or other methods of opportunity to provide financial return upon retirement from medical practice, whether due to age or disability.

(b) The first members appointed after adoption of this amendment shall serve terms of one, two, three and four years respectively, and thereafter one member shall be appointed annually for a term of four years.

(c) This sub-committee shall be responsible for developing and placing into operation such retirement plan or plans, participation in which shall be limited to active members of this Association, and shall operate

Mrs. Leonard W. Larson, wife of the president of the American Medical Association, accompanied her husband to The Greenbrier. Left to right, Mrs. Charles L. Goodhand of Parkersburg, Mrs. Larson, Mrs. Frank J. Holroyd of Princeton, and John Pompelli of Chicago, AMA Field representative.

only on a voluntary basis. The Council shall approve the original plans, and any future change therein, upon the recommendation of the sub-committee, or by separate Council action.

(d) An annual report of the sub-committee's activities, together with pertinent fiscal statistics, shall be made to the House of Delegates, and to each member participating in any such retirement program.

(e) The sub-committee shall have the authority to enter into contracts or agreements, to supervise investments and insurance trust, or other matters pertinent to the proper conduct of this program, upon advice and consent by the Council.

Names and Duties of Committee Changed

The House also adopted amendments which change the name of the Committee on Medical Education and Scholarships and enlarge its duties. The amendments follow:

(1) Amend Chapter VIII, Section 1, By-Laws, as follows: In the list of Committees contained in that Section delete "Committee on Medical Education and Scholarships" and insert in lieu thereof "Committee on Medical Education, Hospitals and Scholarships."

(2) Amend Chapter VIII, Section 5, By-Laws, Paragraph (i) as follows: By deleting the first sentence in that paragraph and inserting in lieu thereof the following: "This Committee shall make a continuing study of all problems of premedical, undergraduate and graduate medical education, hospitals and associated subjects, shall suggest and aid in instituting means and methods for improving conditions in these fields, and shall keep the Council and House of Delegates informed of pertinent developments in the program."

Dr. Charles L. Goodhand Named Head Of Parkersburg Charter Board

Dr. Charles L. Goodhand of Parkersburg has been elected permanent chairman of the Parkersburg Charter Board which was named in a recent election in which voters of the city decided in favor of forming a new Charter for Parkersburg.

Doctor Goodhand and the other members of the Board are charged with the responsibility of drafting a Charter, after which it will be presented to the electorate for approval or rejection.

Doctor Goodhand was elected vice president of the State Medical Association during the Annual Meeting at The Greenbrier in August.

ACP Course at the Mayo Clinic

A postgraduate course on the "Internists Role in the Pre- and Postoperative Care of the Surgical Patient" will be presented by the American College of Physicians at the Mayo Clinic in Rochester, Minnesota, November 6-10. Co-directors will be Drs. James C. Cain and Hugh R. Butt.

Registration fee for ACP members is $60 and $80 for non-members. Registration for the five-day meeting is limited to 130.

Further information may be obtained by writing the American College of Physicians, 4200 Pine Street, Philadelphia 4, Pennsylvania.

Cancer Research Grants Awarded In West Virginia

Three grants in support of cancer research in West Virginia have been awarded by the American Cancer Society. Announcement of the grants was made by Dr. G. Congdon Wood, the Society's acting vice president for research.

Dr. Cornelia Hach-Ligeti received a $7,635 grant and Dr. Emil Swepston was awarded $1,995. Both physicians are members of the staff at the VA Center in Martinsburg.

An institutional research grant for $15,000 was made to West Virginia University.

Money for such grants is obtained from contributions made by the general public during the Society's annual Crusade, an educational and fund-raising drive held each spring.

1962 Meeting at The Greenbrier

At the final session of the House of Delegates on Saturday, August 26, it was ordered by the unanimous vote of the delegates present that the 95th Annual Meeting of the State Medical Association be held at The Greenbrier in 1962. The meeting is scheduled for August 23-25.

Allergy Meeting in Minneapolis in April

A graduate instructional course and 18th Annual Congress of the American College of Allergists will be held at the Hotel Radisson in Minneapolis, Minnesota, April 1-6, 1962.

Further information may be obtained by writing the treasurer, Dr. John D. Gillaspie, 2141 Fourteenth Street, Boulder, Colorado.

Ob. and Gyn. Examination

The American Board of Obstetrics and Gynecology has announced that the next scheduled examination (Part I), written, will be held in various cities throughout the country on January 5, 1962. Current bulletins may be obtained by writing to Robert F. Faulkner, Executive Secretary, 2105 Adelbert Road, Cleveland 6, Ohio.

Anesthesia Research Fund

The West Virginia Society of Anesthesiologists, during its annual meeting at The Greenbrier in White Sulphur Springs, voted to establish an Anesthesia Research Fund for the Department of Anesthesiology at the West Virginia University School of Medicine.

Blood Bank Meeting in Chicago

The 14th Annual Meeting of the American Association of Blood Banks will be held at the Drake Hotel in Chicago, October 25-28. More than 1,000 physicians, research scientists, technologists and administrators from this country and abroad are expected to attend the four-day meeting.

Dr. Annis Delivers Inspiring Address At Presidential Dinner

More than 275 physicians, their wives and guests attended the Presidential Dinner which was held at The Greenbrier on Saturday evening, August 26.

The speaker was Dr. Edward R. Annis of Miami, Florida, who delivered an inspiring address on the problems confronting the medical profession in the United States.

The invocation was given by Dr. Walter E. Vest of Huntington and the speaker was introduced by Dr. Leonard W. Larson of Bismarck, North Dakota, President of the American Medical Association.

Presidential Citations

Another feature was the presentation of Presidential Citations to 23 state physicians who were honored for "outstanding public service, outside the practice of medicine, to your community and West Virginia."

The awards were presented to the following physicians by Dr. John W. Hash of Charleston, the retiring president:

Dr. Ernest T. Cobb, Ronceverte; Drs. Richard W. Corbitt, William E. Gilmore, S. William Goff, Thomas L. Harris and Paul L. McCuskey, Parkersburg; Dr. E. Lyle Gage, Bluefield; Dr. Daniel Hale, Princeton; and Drs. G. Thomas Evans and Rupert W. Powell, Fairmont.

Dr. William R. Laird, Montgomery; Dr. R. F. Miller, Paden City; Dr. E. Burl Randolph, Clarksburg; Dr. Clark K. Sleeth, Morgantown; Dr. Tracy N. Spencer, Jr., South Charleston; and Dr. Everett H. Starcher, Logan.

Dr. James W. Stokes, Hinton; Dr. Walter E. Vest, Huntington; Dr. Ward Wylie, Mullens; and Drs. G. B. Capito (awarded posthumously), George R. Callender, Jr., W. Paul Elkin and Eugene J. Ryan, Charleston.

Dr. D. E. Greeneltch of Wheeling, who was installed as President of the State Medical Association on Saturday afternoon, introduced the past presidents and their wives who were seated together in the banquet hall. He also introduced the presidents and their wives of three neighboring state medical associations who were in attendance at the meeting.

Presentation of Golf Prizes

Dr. Joseph A. Smith of Dunbar, chairman of the Golf Committee, presented prizes to winners of the medical golf tournament held in connection with the annual meeting.

Dr. William C. Morgan, Jr., of Charleston, won the championship with a score of 77. The runner-up was Dr. R. R. Brown of Romney, who shot a 78.

Banquet Favors

Cigarette lighters were given as favors and they were distributed to guests throughout the dining room by several lovely young ladies, daughters of physician members of the Association.

Reception for Association Officers

The Presidential Dinner was preceded by a Reception on the Chesapeake Hall Terrace honoring officers of the West Virginia State Medical Association. In the receiving line were officers of the Association and Auxiliary, and Dr. and Mrs. Leonard W. Larson.

Van Meter Prize Award

The American Thyroid Association is again offering the Van Meter Prize Award of $500 to the essayist submitting the best manuscript of original and unpublished work concerning "Goiter—Especially Its Basic Cause." The award will be presented at the Annual Meeting of the Association which will be held at the Roosevelt Hotel in New Orleans, May 9-12, 1962.

The essays should not exceed 3,000 words and must be submitted by January 1 to the Secretary, Dr. Theodore Winship, 430 N. Michigan Avenue, Chicago 11, Illinois.

Left to right. John Pompelli of Chicago, Dr. Vernon L. Dyer of Petersburg, Dr. S. Elizabeth McFetridge of Shepherdstown, Dr. J. C. Huffman of Buckhannon, Mrs. Clark K. Sleeth of Morgantown, Dr. Walter E. Vest of Huntington, Mrs. L. J. Pace of Princeton, Dr. John W. Hash of Charleston, and Mrs. Leonard W. Larson.

Shown above are several of the 23 state physicians who received Presidential Citations at the Presidential Dinner on Saturday evening, August 26. Left to right, Drs. Thomas L. Harris, S. William Goff and William E. Gilmore, all of Parkersburg, E. Lyle Gage of Bluefield, and Richard W. Corbitt of Parkersburg.

Gerontological Soc. Meeting in Pittsburgh

The 14th Annual Meeting of the Gerontological Society will be held at the Penn-Sheraton Hotel in Pittsburgh, November 9-11.

The program will be divided into four sections reflecting the four professional divisions of the Society, clinical medicine, biology, psychology and social welfare.

Further information concerning the meeting may be obtained by writing the Gerontological Society, 660 S. Kingshighway Boulevard, St. Louis, Missouri.

Southern Chapter, ACCP, To Meet in Dallas

The Southern Chapter of the American College of Chest Physicians will meet at the Sheraton Dallas Hotel in Dallas, Texas, November 4-5. The meeting will be held just prior to the annual meeting of the Southern Medical Association in that city.

SMA Section on Oph. and Otol. To Meet in Dallas, Nov. 6-9

Dr. Trygve Gundersen of Boston will be the guest speaker at the annual meeting of the Section on Ophthalmology and Otolaryngology of the Southern Medical Association during the annual meeting in Dallas, Texas, November 6-9.

A feature of the program will be television surgical clinics on glaucoma and laryngectomy. There also will be papers and symposia on corneal diseases, contact lens, retinal detachment, tympanoplasty, otitis media, and tonsillar techniques.

Further information may be obtained by writing the Secretary, Dr. Albert C. Esposito, 1212 1st Huntington National Bank Building, Huntington, West Virginia.

Relocations

Dr. Stephen Mamick has been appointed Head of the Department of Radiology at the Stevens Clinic Hospital in Welch. He recently completed postgraduate training at the Bowman-Gray School of Medicine of Wake Forest College in Winston-Salem, North Carolina.

* * * *

Dr. Roydice Staats of Beckley, who has been a member of the staff at the VA Hospital in that city for the past five years, has moved to Florida to accept a position at the Bay Pines VA Hospital near St. Petersburg, Florida.

* * * *

Dr. Robert J. Nottingham of Morgantown, who has practiced his specialty of pediatrics in that city for more than 12 years, has moved to Denver, Colorado, where he has accepted a two-year fellowship in the Pediatric Allergy Service at the University of Colorado Medical Center. His address in Denver is 3589 E. Virginia Street.

Left to right, Dr. D. E. Greenelteh of Wheeling, Dr. Edward R. Annis of Miami, Florida, Mrs. D. E. Greenelteh of Wheeling, Dr. Leonard W. Larson, Mrs. John W. Hash of Charleston, Dr. L. J. Pace of Princeton, Mrs. Vernon L. Dyer of Petersburg, Dr. Clark K. Sleeth of Morgantown, Mrs. J. C. Huffman of Buckhannon, and Dr. Halvard Wanger of Shepherdstown.

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CAMERA HIGHLIGHTS

94th Annual Meeting

WEST VIRGINIA STATE MEDICAL ASSOCIATION

The Greenbrier

Aug. 24-26, 1961

(Identifying Notes on Page 395)

Standing and Special Committees Named by Doctor Greeneltch

Dr. D. E. Greeneltch of Wheeling, President of the West Virginia State Medical Association, has named the standing and special committees which will function during his term of office.

There are three new committees as a result of amendments to the By-Laws that were adopted during the 94th Annual Meeting in August. The new committees are the "Committee on Military Medical Affairs," "Committee on Budget and Personnel," and "Committee on Nominations."

The Committee on Nominations will be appointed prior to the adjournment of the first meeting of the House of Delegates at the Annual Meeting and shall consist of the senior councillor in point of service from each Councillor District, together with the current Councillor-at-Large, who shall act as chairman.

The committee will consider and recommend to the House of Delegates, prior to the election of officers at the second session of the House, its nominee for the office of president elect, vice president, treasurer and the AMA delegate and alternate.

The House also adopted an amendment which changes the name of the Committee on Medical Education and Scholarships to "Committee on Medical Education, Hospitals and Scholarships."

Another amendment enlarged the duties of the committee as follows: "This committee shall make a continuing study of all problems of premedical, undergraduate and graduate medical education, hospitals and associated subjects, shall suggest and aid in instituting means and methods for improving conditions in these fields, and shall keep the Council and House of Delegates informed of pertinent developments in the program."

The complete list of committees follows:

STANDING COMMITTEES

Aging

E. Lyle Gage, Bluefield, Chairman; Thomas H. Blake, St. Albans; Myer Bogarad, Weirton; W. Paul Bradford, Moundsville; George R. Callender, Jr., Charleston; Francis L. Coffey, Huntington; William E. Gilmore, Parkersburg; C. H. Hiles, Wheeling; L. J. Pace, Princeton; and R. W. W. Phillips, Wheeling.

Budget and Personnel

George F. Evans, Clarksburg, (1962); J. C. Huffman, Buckhannon, (1963); and John W. Hash, Charleston, (1964).

Cancer

John T. Jarrett, Charleston, Chairman; Hunter Boggs, Charleston; Herbert G. Dickie, Willard J. Howland and H. G. Little, Wheeling; T. P. Mantz, Charleston; Hu C. Myers, Philippi; David W. Palmer and J. Speed Rogers, Wheeling; Russell A. Salton, Williamson; W. Hampton St. Clair, Bluefield; C. Truman Thompson, Morgantown; and Chauncey B. Wright, Huntington.

Conservation of Vision and Hearing

Nime K. Joseph, Wheeling, Chairman; R. Alan Fawcett, Wheeling; William K. Marple, Huntington; W. W. McKinney, Beckley; Ralph W. Ryan, Morgantown; and Edwin M. Shepherd, Charleston.

Constitution and By-Laws

Richard E. Flood, Weirton, Chairman; George L. Armbrecht, Wheeling; Daniel N. Barber and A. C. Chandler, Charleston; S. Elizabeth McFetridge, Shepherdstown; Buford W. McNeer, Hinton; Delbert C. Smith, Fairmont; James E. Spargo, Jr., Wheeling; and Wade H. St. Clair, Bluefield.

Insurance

Charles A. Hoffman, Huntington, Chairman; Herbert M. Beddow, Charleston; W. P. Bittinger, Summerlee; S. S. Bobes, Wheeling; Upshur Higginbotham, Bluefield; Kenneth G. MacDonald, Charleston; Paul L. McCuskey, Parkersburg; J. S. Meier, Wheeling; Seigle W. Parks, Fairmont; L. B. Thrush, Clarksburg; and Eldon B. Tucker, Morgantown.

Legislative

Frank J. Holroyd, Princeton, Chairman; Don S. Benson, Moundsville; Robert T. Brandfass, Wheeling; Richard W. Corbitt, Parkersburg; A. C. Esposito, Huntington; Frank V. Langfitt, Clarksburg; Charles W. Merritt, Beckley; Justus C. Pickett, Morgantown; Thomas G. Reed, Charleston; A. J. Villani, Welch; and Ward Wylie, Mullens.

Maternal Welfare

Charles L. Goodhand, Parkersburg, Chairman; Harold D. Almond, Buckhannon; Paul H. Cope, Wheeling; Frederick H. Dobbs, Charleston; C. S. Harrison, Clarksburg; William S. Herold, Charleston; Edwin J. Humphrey, Huntington; Robert W. Leibold, Wheeling; J. Preston Lilly, Charleston; and A. J. Villani, Welch.

Medical Economics

James S. Klumpp, Huntington, Chairman; George R. Callender, Jr., Charleston; R. U. Drinkard, Wheeling; James A. Heckman, Huntington; Henry M. Hills, Jr., Charleston; Charles A. Hoffman, Huntington; Athey R. Lutz, Parkersburg; John E. Lutz, Charleston; Seigle W. Parks, Fairmont; J. C. Pickett, Morgantown; W. Fred Richmond, Beckley; Charles M. Scott, Bluefield; Harry S. Weeks, Jr., Wheeling; and J. D. H. Wilson, Clarksburg.

Medical Education, Hospitals and Scholarships

Russel Kessel, Charleston, Chairman; Carl B. Hall, Charleston; Sobisca S. Hall, Clarksburg; Thomas L. Harris, Parkersburg; Joe N. Jarrett, Oak Hill; John M. Moore, Wheeling; J. P. McMullen, Wellsburg; Clark K. Sleeth, Morgantown; William A. Thornhill, Jr., Charleston; and M. B. Williams, Wheeling.

Medical Emergencies and Civil Defense

John A. B. Holt, Charleston, Chairman; Ray S. Greco, Weirton; Robert Greco, Morgantown; David A. Haught, Huntington; Logan W. Hovis, Parkersburg; Leonard P. Hudnall, Wheeling; E. Leon Linger, Clarks-

burg; Charles T. Lively, Weston; George Miyakawa, Charleston; Lester D. Norris, Fairmont; and M. D. Reiter, Wheeling.

Medico-Legal

Walter E. Vest, Huntington, Chairman; E. M. Clubb, Jr., Weirton; Richard V. Lynch, Jr., and J. Keith Pickens, Clarksburg; Robert J. Reed, Jr., Wheeling; Thomas G. Reed, Charleston; Harold Van Hoose, Man; and Paul P. Warden, Grafton.

Mental Health

A. L. Wanner, Wheeling, Chairman; Randall Connolly, Vienna; Thomas J. Holbrook, Huntington; W. Parke Johnson, Jr., Masontown; Thomas S. Knapp, Charleston; L. J. Pace, Princeton; John L. Rittmeyer, Philippi; William B. Rossman, Charleston; Stephen D. Ward, Wheeling; and William E. Wilkinson, Beckley.

Military Medical Affairs

Bert Bradford, Jr., Charleston, Chairman; S. S. Bobes, Wheeling; A. C. Esposito, Huntington; Charles L. Goodhand, Parkersburg; Russel Kessel, Charleston; L. Rush Lambert, Fairmont; Richard V. Lynch, Jr., Clarksburg; Charles M. Scott, Bluefield; Harold Van Hoose, Man; and Ward Wylie, Mullens.

Necrology

Andrew J. Weaver, Clarksburg, Chairman; E. L. Crumpacker, White Sulphur Springs; Ralph McGraw, Follansbee; and William Perilman, Wheeling.

Program

Halvard Wanger, Shepherdstown, Chairman; George P. Heffner, Charleston; and Charles D. Hershey, Wheeling.

Public Service

Joseph L. Curry, Wheeling, Chairman; James D. Bird, Wheeling; William E. Bray, Jr., Huntington; John T. Chambers, Charleston; C. R. Davisson, Weston; G. Thomas Evans, Fairmont; Logan W. Hovis, Parkersburg; Carl E. Johnson, Morgantown; Charles L. Leonard, Elkins; John J. Mahood, Bluefield; L. E. Neal, Clarksburg; C. A. Smith, Beckley; and Everett H. Starcher, Logan.

Resolutions

A. C. Esposito, Huntington, Chairman; C. R. Davisson, Weston; Maynard P. Pride, Morgantown; Pat A. Tuckwiller, Charleston; and Howard G. Weiler, Wheeling.

Rehabilitation

Justus C. Pickett, Morgantown, Chairman; C. B. Buffington and George R. Clarke, Wheeling; James A. Heckman, Huntington; Thomas S. Knapp, Harold H. Kuhn and Milton J. Lilly, Jr., Charleston; Edward S. Phillips and Robert O. Strauch, Wheeling.

Rural Health

Martha Jane Coyner, Harrisville, Chairman; Andrew E. Amick, Lewisburg; J. C. Arnett, Rowlesburg; W. T. Booher, Wellsburg; J. M. Brand, Chester; T. O. Dickey, McMechen; S. Charles Dotson, Morgantown; Allen M. Dyer, Jr., Pine Grove; Vernon L. Dyer, Petersburg; Earl L. Fisher, Gassaway; J. C. Huffman, Buckhannon; Charles E. Staats, Charleston; and E. M. Wilkinson, Pineville.

Syphilis

N. H. Dyer, Charleston, Chairman; Ross O. Bell, Jr., and Paul V. Graham, Wheeling; Paul L. McCuskey, Parkersburg; C. Y. Moser, Kingwood; E. E. Myers, Philippi; Arthur L. Osterman, Wheeling; Frank M. Peck and Bruce H. Pollock, Huntington; and Thomas L. Thomas, Wheeling.

Tuberculosis

Ralph H. Nestmann, Charleston, Chairman; Deane F. Brooke, Beckley; Andrew K. Butler, Wheeling; William L. Cooke, Charleston; Robert M. Sonneborn and William J. Steger, Wheeling; and M. L. White, Jr., Huntington.

SPECIAL COMMITTEES

American Medical Education Foundation

Earl S. Phillips, Wheeling, Chairman; Arthur A. Abplanalp, Charleston; Charles H. Barnett, Parkersburg; David F. Bell, Jr., Bluefield; Dante Castrodale, Welch; Harry F. Cooper, Beckley; Lee F. Dobbs, Jr., Huntington; John E. Echols, Richwood; Robert J. Fleming, Morgantown; Ray M. Kessel, Logan; Stephen Mamick, Welch; S. Elizabeth McFetridge, Shepherdstown; Karl J. Myers, Philippi; Lester D. Norris, Fairmont; J. Keith Pickens, Clarksburg; and David S. Pugh, Chester.

Medical-Dental Liaison

Edgar F. Heiskell, Jr., Morgantown, Chairman; Don S. Benson, Moundsville; Clyde Litton and Newman H. Newhouse, Charleston; and Robert S. Robbins, Wheeling.

Medico-Pharmaceutical Relations

L. Dale Simmons, Clarksburg, Chairman; Andrew E. Amick, Lewisburg; Harold B. Ashworth, Moundsville; Joseph Gilman, Clarksburg; and Gordon L. Todd, Jr., Princeton.

Nurses Liaison

William C. D. McCuskey, Wheeling, Chairman; W. Fred Richmond, Beckley; William M. Sheppe, Wheeling; William A. Thornhill, Jr., Charleston; and Edward J. Van Liere, Morgantown.

School Health

Leo H. Mynes, Charleston, Chairman; Kenneth D. Bailey, Fairmont; Robert T. Bandi, Wheeling; William M. Bruch, Bluefield; Donald M. Burke, Elkins; W. W. Currence, South Charleston; Thomas G. Folsom, Huntington; Emma Jane Freeman, Buckhannon; Grover C. Hedrick, Jr., Beckley; and Warren D. Leslie, Wheeling.

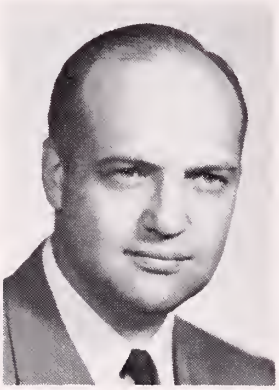
WVU Liaison

George F. Evans, Clarksburg, Chairman; W. Carroll Boggs, Wheeling; D. Sheffer Clark, Huntington; R. U. Drinkard, Wheeling; Carl B. Hall, John W. Hash and John A. B. Holt, Charleston; J. C. Huffman, Buckhannon; Charles L. Leonard, Elkins; J. P. McMullen, Wellsburg; Maynard P. Pride, Morgantown; and L. Dale Simmons, Clarksburg.

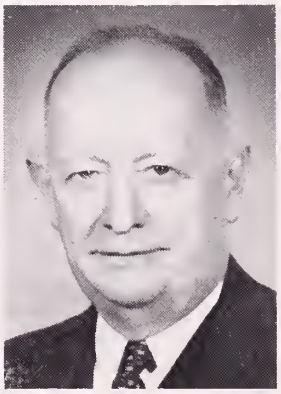
Sixth Annual Postgraduate Institute At Martinsburg, Oct. 27-29

Twenty-four prominent physicians and scientists will appear as guest speakers at the Sixth Annual Potomac-Shenandoah Valley Postgraduate Institute in Martinsburg, October 27-29.

The three-day meeting will be sponsored jointly by the Eastern Panhandle Medical Society and the West Virginia Chapter of the American Academy of General



John H. Moyer, M. D.



William S. Middleton, M. D.

Practice. Members of the American Academy of General Practice will be granted 10 hours Category One Credit for attendance at the meeting.

Dr. Halvard Wanger of Shepherdstown, the general chairman, has announced that the program will also feature addresses by Virgil Carrington Jones, noted Civil War author and historian; Drew Pearson, commentator and author; and Dr. Perry S. MacNeal of Philadelphia.

Scientific and industrial exhibits will be housed in the Shenandoah Hotel and the scientific sessions will be held in the Apollo Theater.

Friday Morning Session

The first scientific session will be held on Friday morning, October 27, at which time the following program on medicine will be presented:

"Electrolyte Problems in Heart Disease."—Julian R. Beckwith, M. D., Associate Professor of Medicine, University of Virginia School of Medicine, Charlottesville.

"Medical Education in Community Hospitals."—Barry Decker, M. D., Director of Medical Education, Richmond Memorial Hospital, Richmond Virginia.

"Newer Diagnostic Office Procedures."—John H. Hodges, M. D., Associate Professor of Medicine, Jefferson Medical College, Philadelphia.

"Emphysema."—Sol Katz, M. D., Associate Professor of Medicine, George Washington University School of Medicine, and Professorial Lecturer, Georgetown University School of Medicine, Washington, D. C.

Friday Afternoon

Following a recess for a round table discussion at luncheon and visiting exhibits, the following program on medicine will be presented:

"The Adreno-Corticoids in Medicine."—Thomas H. McGavack, M. D., Professor Emeritus of Clinical Medicine, New York Medical College, and Professorial Lecturer, George Washington University School of Medicine.

"The Clinical and Laboratory Diagnosis of Coronary Heart Disease."—Henry J. L. Marriott, M. D., Associate Professor of Medicine, University of Maryland School of Medicine, Baltimore.

"Problems in the Management of Heart Failure."—Thomas W. Mattingly, M. D., Clinical Professor of Medicine, Georgetown University School of Medicine, Washington, D. C.

"Hypoglycemia."—James M. Moss, M. D., Clinical Professor of Medicine, Georgetown University School of Medicine, Washington, D. C.

"Certain Clinical Manifestations of Impending Arterial Insufficiency with Measures for Their Control."—William S. Middleton, M. D., Medical Director of the Veterans Administration, and formerly Professor and Head, Department of Medicine, University of Wisconsin School of Medicine.

Address by Virgil Carrington Jones

Virgil Carrington Jones will be the speaker at the dinner on Friday evening. His subject will be "Civil War Guerillas in the Eastern Theatre."

Physicians and their wives are invited to attend a dance that evening. Music will be furnished by Russ Lang's Orchestra of Washington.

Thomas W. Mattingly, M. D.

John O. Moore, Ph. D.

Saturday Morning Session

The morning session on Saturday will be devoted to medicine. The speakers and their subjects will be as follows:

"The Management of the Patient with Headache."—Perry S. MacNeal, M. D., Associate Clinical Professor of Medicine, University of Pennsylvania School of Medicine, Philadelphia.

"Treatment of the Ambulatory Patient with Hypertension."—John H. Moyer, M. D., Professor and Chairman of Medicine, Department of Internal Medicine, Hahnemann Medical College and Hospital, Philadelphia.

"The Choice of Sympathomimetic Amine."—John C. Krantz, Ph. D., Professor of Pharmacology, University of Maryland School of Medicine, Baltimore.

"Chemotherapy of Cancer."—Louis K. Alpert, M. D., Clinical Professor of Medicine, George Washington University School of Medicine, Washington, D. C.

Afternoon Session

There will be a round table discussion at the luncheon at noon on Saturday. The afternoon program will feature a panel on "Auto Safety—This May Save Your Life." The speakers and their subjects will be as follows:

"Medical Aspects of Travel Safety."—Albert Chapman, M. D., Chief, Division of Accident Prevention, Public Health Service, HEW.

"How Can We Prevent Injury in Auto Accidents."—John O. Moore, Ph. D., formerly Director of Automotive Crash Injury Research, Cornell University.

"Head and Spinal Injuries."—James W. Watts, M. D., Professor and Chairman, Department of Neurology and Neurological Surgery, George Washington University School of Medicine, Washington, D. C.

Drew Pearson Dinner Speaker

Drew Pearson will be the speaker at a dinner on Saturday evening. His subject will be "Washington Merry-Go-Round."

Physicians and their wives attending the meeting are invited to travel to nearby Hagerstown, Maryland, for the Mummer's Parade beginning at 8 o'clock. Bus transportation and reserved seats will be provided for this Halloween parade.

Sunday Morning Session

All papers that will be presented on Sunday morning will concern pediatrics. The program follows:

"The Pediatrician Looks at Dermatology."—Earl H. Baxter, M. D., Professor and Chairman, Department of Pediatrics, Ohio State University College of Medicine, Columbus.

"Hypertension in Infants and Children."—J. Edmund Bradley, M. D., Professor and Head, Department of Pediatrics, University of Maryland School of Medicine.

"The Anemias of Infancy and Childhood."—Felix E. Karpinski, Jr., M. D., Clinical Professor of Pediatrics, Jefferson Medical College, Philadelphia.

"Unexplained Fever in Children."—Weston Kelsey, M. D., Professor and Director, Department of Pediatrics, Bowman-Gray School of Medicine.

'Medical Ethics for the Doctor's Wife'

Dr. Perry S. MacNeal of Philadelphia will be the speaker at the luncheon on Sunday. His subject will be "Medical Ethics for the Doctor's Wife."

Afternoon Session

The following program on obstetrics and gynecology will be presented on Sunday afternoon:

"The Underweight and Overweight Obstetrical Patient."—D. Frank Kaltreider, M. D., Professor of Obstetrics and Gynecology, University of Maryland School of Medicine, Baltimore.

"Conservation Versus Prophylaxis in Gynecologic Surgery."—Clyde L. Randall, M. D., Professor and Head of the Department of Obstetrics and Gynecology, University of Buffalo School of Medicine, Buffalo, New York.

"The Use and Abuse of Pitocin."—H. Hudnall Ware, Jr., M. D., Professor and Chairman of the Department of Obstetrics and Gynecology, Medical College of Virginia, Richmond.

"The Management of Urinary Tract Infections in Women."—John D. Young, Jr., M. D., Professor of Urology and Head of the Division of Urological Surgery, University of Maryland Hospital.

The registration fee is $25 for the entire three-day course and $10 for a single day. Further information concerning the Institute may be obtained by writing to Halvard Wanger, M. D., General Chairman, Box 175, Shepherdstown, West Virginia.

Symposium on Trauma and Disaster Medicine in Charlottesville

A Symposium on Trauma and Disaster Medicine will be held in Charlottesville, Virginia, November 3-4, under the joint auspices of the Medical Education for National Defense Programs of the University of Virginia School of Medicine and Medical College of Virginia, and the Virginia Committee on Trauma of the American College of Surgeons.

The first session will be held on Friday morning, November 3, with Dr. William R. Sandusky presiding. He is MEND coordinator for the University of Virginia. An address of welcome will be delivered by Dean Thomas H. Hunter.

Several prominent physicians and surgeons will present papers on the following subjects during the two-day meeting:

The human element in air safety, the emergency room, injuries of the hand, control of infection in trauma, early management of the burned patient, patterns of casualties in natural and accidental disaster, mechanisms of injury in automobile accidents, survival car II, athletic injuries, air splint for the first aid treatment of fractures, and closed chest cardiac massage.

West Virginia physicians have been extended an invitation to attend the symposium. Further information may be obtained by writing to Mrs. Anne Kavanaugh, Secretary, Postgraduate Conference, University of Virginia Hospital, Box 329, Charlottesville, Virginia.

Record Blue Shield Payments

The nationwide Blue Shield Plans paid out more than $206-million for medical-surgical care rendered to members during the first three months of 1961, the National Association of Blue Shield Plans reported recently.

The $206,321,765 paid on behalf of Blue Shield members to the medical profession represented a record high for a three-month period, and accounted for nearly 92 per cent of the total income of these medical-surgical plans.

Medical School in New Mexico

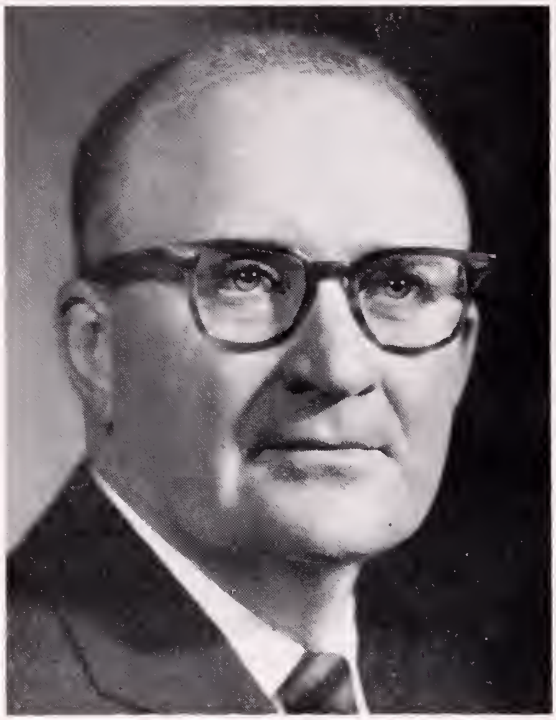
The University of New Mexico, at Albuquerque, is developing a medical school which will, in the beginning, give two years in the basic medical sciences. Dr. Reginald H. Fitz, currently Associate Dean at the University of Colorado School of Medicine, has accepted appointment as Dean at the New Mexico school.

Dr. Thomas A. Loftus Named Chairman Of WVU Department of Psychiatry

Dr. Thomas A. Loftus of Philadelphia has accepted appointment as Professor and Chairman of the Department of Psychiatry at the West Virginia University School of Medicine. The appointment was announced by Acting University President Clyde L. Colson.

Doctor Loftus, who is now Associate Professor of Psychiatry at the Jefferson Medical College of Philadelphia, will join the University staff by January 1962.

Doctor Loftus, a native of Massachusetts, was graduated from La Salle College in 1936, received his M. D.



Thomas A. Loftus, M. D.

degree from the University of Pennsylvania School of Medicine in 1940. Following internship he received three years of special psychiatric training at the Payne Whitney Clinic, Cornell Medical School, New York City. He then served as chief of the Neuropsychiatry Service at the U.S. Navy Base Hospital No. 21, Central Pacific.

Upon return from active military service he completed an additional three years of study and training in psychoanalytic medicine at the Columbia University Institute in New York City. He was certified in psychiatry by the American Board of Neurology and Psychiatry in 1946.

He served on the faculty of the Department of Psychiatry at Cornell from 1941-1944, and similarly at Columbia from 1950-52. From 1946 to 1955 he was a Consultant to the Surgeon General, U.S.A., teaching psychosomatic medicine at various military hospitals. Since 1948 he has assisted in the examination of candidates for certification by the American Board of Neurology and Psychiatry. In 1957 he joined the faculty of Jefferson Medical College of Philadelphia.

Doctor Loftus holds membership in the American Psychiatric Association, the Association for Psychoanalytic Medicine, the Academy of Psychoanalysis, the Pennsylvania Psychiatric Society, the Philadelphia County Medical Society, the Pennsylvania Medical Association, and the American Medical Association. He has published several papers in his specialty and in 1960 published a book entitled "Meaning and Methods of Diagnosis in Clinical Psychiatry" (Lea and Febiger).

During the past four years Doctor Loftus has had primary responsibility for the organization and implementation of the teaching of psychiatry for medical students at the Jefferson Medical College.

In recommending his appointment Dean Clark K. Sleeth of the West Virginia University School of Medicine stated:

"We have received warm recommendations from the Dean and the Department Chairman at Jefferson, as well as from Doctor Loftus' earlier mentors at Cornell and Columbia. He has twice visited our own School and has the wholehearted endorsement of the chairmen of the various Clinical Departments. His unusually thorough training and rich background in both clinical and analytic psychiatry should assure a well balanced approach to the education of medical students. We are fortunate in having Doctor Loftus agree to head our Department of Psychiatry."

Doctor Loftus is married and the father of three sons. With his appointment the staffing of the chairmanship of clinical departments at the West Virginia University School of Medicine is now complete.

Medical Meetings, 1961

The following is a partial list of national, state and district medical meetings scheduled for 1961:

Oct. 2-6—Endocrinology PG Course, Bethesda, Md.
Oct. 2-6—Am. Coll. Surgeons, Chicago.
Oct. 5—Rural Health Conference, Jackson's Mill.
Oct. 6-7—Cong. on Medical Quackery, Washington, D. C.
Oct. 11-12—W. Va. TB and Health Assn., Elkins.
Oct. 18—W. Va. St. Nurses Assn., Clarksburg.
Oct. 19-21—W. Va. Hospital Assn., Morgantown.
Oct. 23-24—American Cancer Society, New York City.
Oct. 27-29—PG Institute, Martinsburg.
Nov. 6-9—Southern Medical Assn., Dallas, Texas.
Nov. 11—Pediatric Conference, WVU School of Medicine, Morgantown.
Nov. 13-16—Interstate PG Assembly, Cleveland.
Nov. 13-17—American PH Assn., Detroit, Mich.
Nov. 17-21—National Society for Crippled Children, Denver.
Nov. 27-Dec. 1—AMA Clinical Meeting, Denver.

Fallout Shelters

The Public Policy Committee of the American Academy of General Practice has urged President Kennedy and Congress to enact legislation that would allow home owners to deduct, from adjusted gross income, the cost of constructing atomic fallout shelters.

A bill providing for fallout shelter deductions has already been introduced by Senator George A. Smathers of Florida.

Pre-Convention Council Meeting At The Greenbrier, Aug. 23

The Pre-Convention meeting of the Council was held at The Greenbrier in White Sulphur Springs on August 23, 1961, with the chairman, Dr. J. C. Huffman of Buckhannon, presiding.

Report of Insurance Committee

The Insurance Committee, headed by Dr. Charles A. Hoffman of Huntington, submitted a report concerning proposed amendments to the By-Laws pertaining to the addition of a sub-committee to the Committee on Insurance, and the establishment of a Committee on Budget and Personnel.

He explained that it would be the responsibility of the sub-committee to develop and place into operation a retirement and investment program on a voluntary basis for the members of the Association.

Doctor Hoffman also discussed the amendment pertaining to the establishment of a Budget and Personnel Committee to act in an advisory capacity to the President upon all matters relating to the operations of the Association's headquarters office.

The Council went on record as approving the proposed amendments and recommended that they be adopted by the House of Delegates.

(A news story concerning adoption of several amendments to the By-Laws appears elsewhere in this issue of *The Journal.*)

Report of AMEF Committee

Dr. C. R. Davisson of Weston, Chairman of the AMEF Committee, presented a report concerning contributions by West Virginia physicians during the first six months of 1961.

He said that West Virginia contributors forwarded to the AMEF $9,478.07 during the first six months of 1961. He compared this with the $5,223 contributed during the entire calendar year of 1960, and $7,286.12 in 1959.

Doctor Davisson further reported that the $10 voluntary assessment levied against members of the State Medical Association this year appeared to be successful. He said that approximately 50 per cent of the membership contributed $10 to the AMEF through means of the voluntary assessment.

The Council approved the report and commended Doctor Davisson and the members of his committee for their splendid work during the past year.

Cancer Detection Program

Doctor Huffman read to the Council a communication from Mrs. John F. McCuskey of Clarksburg, President of the West Virginia Federation of Women's Clubs, in which she stated that a cancer detection program under the joint sponsorship of the Federation and the West Virginia University Medical Center had been inaugurated.

In her letter, Mrs. McCuskey explained that an active campaign will be started to encourage the more than 18,000 members of the State Federation to undergo cyto-pathology diagnostic examinations for the early detection of uterine cancer.

The Council went on record as endorsing the Cancer Detection Program and it was further ordered that the matter be referred to the Cancer Committee for implementation.

Report of Constitution and By-Laws Committee

Dr. Buford W. McNeer of Hinton, Chairman of the Committee on Constitution and By-Laws, reported to the Council that his committee had approved several proposed amendments to the By-Laws.

He stated that two of the amendments would provide for the addition of two new committees to the list of standing committees: "Committee on Nominations" and "Committee on Military Medical Affairs." He said a third amendment would change the name of the "Committee on Medical Education and Scholarships" to "Committee on Medical Education, Hospitals and Scholarships." He further stated that the amendment also would enlarge the duties of the committee.

Following discussion, the Council went on record as approving the report presented by Doctor McNeer and recommended that the amendments be adopted by the House of Delegates.

Report of Medical Economics Committee

Dr. James S. Klumpp of Huntington, Chairman of the Medical Economics Committee, presented a brief report of the more recent activities of his committee and stated that he would present a comprehensive report at the first session of the House of Delegates that evening. (The complete report appears elsewhere in this issue of *The Journal.*)

Memorial Resolution

Dr. Andrew E. Amick of Lewisburg, a past president of the Association, appeared before the Council to present a resolution in memory of Charles Lively, who served as executive secretary of the State Medical Association from 1942 until his death on June 12, 1961.

The following members of the Council were present at the meeting:

Dr. J. C. Huffman, Buckhannon, Chairman; Dr. John W. Hash, Charleston, President; Dr. D. E. Greeneltch, Wheeling, President Elect; Dr. Lawrence J. Pace, Princeton, Vice President; Dr. George F. Evans, Clarksburg, Councillor-at-Large; and Drs. Richard E. Flood, Weirton; Paul P. Warden, Grafton; J. C. Pickett, Morgantown; S. Elizabeth McFetridge, Shepherdstown; C. R. Davisson, Weston; Richard V. Lynch, Jr., Clarksburg; Charles L. Goodhand, Parkersburg; Albert C. Esposito, Huntington; Harold Van Hoose, Man; Clyde A. Smith, Beckley; and Theodore P. Mantz, Charleston; and William H. Lively, Charleston, secretary ex officio.

The meeting was also attended by Dr. Frank J. Holroyd of Princeton, AMA Delegate; Dr. Charles A. Hoffman of Huntington, AMA Delegate; Dr. Thomas G. Reed of Charleston, AMA Alternate; Dr. N. H. Dyer of Charleston, State Director of Health; Dr. Walter E. Vest of Huntington, Editor of *The Journal*; Dr. James S. Klumpp of Huntington, Parliamentarian; Dr. Buford W. McNeer of Hinton, Chairman of the Committee on Constitution and By-Laws; and Mr. John Pompelli of Chicago, AMA Field Representative.

Dr. Sleeth Presents Progress Report Of WVU School of Medicine

Dr. Clark K. Sleeth, Dean of the West Virginia University School of Medicine, presented a progress report of the School before the second session of the State Medical Association's House of Delegates at The Greenbrier on Saturday afternoon, August 26. The report follows:

Clark K. Sleeth, M. D.

I deeply appreciate being offered the privileges of the floor of this House to bring you a brief report of progress being made at the West Virginia University School of Medicine.

Last year at this time Doctor Van Liere, whose patient insistence upon high educational and ethical standards is without doubt largely responsible for recent developments in medical education within this state, was able to present you the prospectus for the future. You will recall that the University Hospital had opened only some ten days earlier, and that all of us were watchfully expectant.

Today we can report encouraging progress in the past year. At last year's convention you saw pictures of some department chairmen; today all clinical department chairmanships are filled. We have 82 M. D. members on our staff, and a total of 106 teaching employees. Perhaps more significantly we have but nine budgeted but unfilled full-time positions.

The average daily hospital census has risen from ten last August to 136 in June. The referral system has resulted in our seeing patients from 47 of the 55 counties of West Virginia, and from nine other states. Outpatient service has enjoyed a similar rapid growth. We have recently revised our system of reporting to referring physicians and are told that the brief discharge summaries, which contain the immediately important information and which are followed by a more detailed letter, are now beginning to reach the referring doctor in a reasonable period of time.

Sixteen students are now beginning their senior year. They have, of course, maintained contacts with former members of their group who have transferred elsewhere and are convinced that the education they are receiving at West Virginia University School of Medicine will equip them fully to take their place among their fellows. From our own continuing observations we, too, are sure this is true.

The junior and sophomore classes will each number 42-43 students, and this fall we will have a freshman class of 60 members, the number for which the School was conceived and designed.

One problem, which certainly cannot be solved by the State Medical Association, nevertheless deserves the thought of all of us. At the present time substantial numbers of patients are referred who have no private funds for hospital care, and who either are not welfare beneficiaries or who have exhausted all such benefits before referral. In furnishing the hospital care for such patients we incur costs which now must be met from soft drinks tax revenue. It is our belief that the soft drinks tax was conceived as educational money, and was never intended to meet welfare needs. At our present level of operation, the problem is financially embarrassing to us. If it continues in its present proportions as our operations expand it can rapidly become financially crippling.

You will be glad to learn that in October the School of Medicine will be visited by a survey team from the Council on Medical Education and Hospitals of the American Medical Association and the Association of American Medical Colleges to survey the school with a view to accreditation as a full four-year school. We are glad to receive the survey early in the academic year with the expectation that our senior students will be aware before too late in the year that their degree will be from a fully accredited school.

We are gratified by the progress of the past year, and face the future with confidence, aware of the extent of professional and public support of the objectives of the School. All of us deeply appreciate the cooperation we are receiving and hope to continue to receive, from the doctors of the state.

Vocational Rehabilitation Division Receives National Recognition

The State Vocational Rehabilitation Division again ranked first in the nation in the proportion of its population rehabilitated during the past fiscal year to productive and satisfying life.

Announcement of the West Virginia top standing was made by Mary E. Switzer, director of the federal office of vocational rehabilitation, in a communication to Governor W. W. Barron which stated in part:

"West Virginia helped 188 disabled people in each 100,000 of population to achieve rehabilitation. This is the highest mark ever set by a state and is almost four times as great as the national average of 51 per 100,000 population.

". . . Not only did West Virginia lead in per capita rehabilitations but ranked fourth among all states in the absolute number of rehabilitations behind only such populous states as New York, Pennsylvania and Georgia.

"I extend my congratulations to you and your Legislature for your wise recognition of the value of vocational rehabilitation and your support of the program. I include congratulations to your Director of Vocational Rehabilitation, F. Ray Power, and the members of the extremely dedicated and efficient staff that he has assembled in all parts of the state."

You can't give character to another person, but you can encourage him to develop his own by possessing one yourself.—Artemus Calloway.

Plans Nearly Completed for AMA Clinical Meeting in Denver

The 15th annual Clinical Meeting of the American Medical Association will be held in Denver, Colorado, November 26-30, with a program geared to basic problems of medicine faced by physicians in their practice.

An outstanding scientific program, with emphasis on new research developments, has been planned under the direction of Dr. Samuel P. Newman of Denver, chairman of the AMA's Council on Scientific Assembly.

Some highlights will include sessions and papers on such important areas of medicine as genes and chromosomes, electronics and computers in medicine, space medicine, medical aspects of American habits, new developments in virology, treatment of radiation injuries, new findings in chemotherapy for cancer and latest data in the field of antibodies and antigens.

The virus, one of the most complex problems facing the clinician, will be the subject of a series of papers by outstanding specialists. Dr. Jonas E. Salk, of Pittsburgh, originator of the killed virus polio vaccine, will give a paper on "Immunization Against Virus Diseases." Other topics will include "The Nature of the Virus and Its Cellular Reaction," "Smallpox Vaccination Complications," "Virus Hepatitis" and "Identification of Viruses."

Greenbrier Pictorial

(See Pages 386-387)

(1) Dr. and Mrs. John W. Hash and Dr. and Mrs. Leonard W. Larson are shown greeting guests at the reception honoring officers on Saturday evening, August 26.

(2) Dr. Halvard Wanger, the program chairman, with Dr. and Mrs. Karl Menninger of Topeka, Kansas.

(3) Dr. Edward L. Compere of Chicago, second from left, a guest speaker, with Dr. George R. Callender, Jr., of Charleston, left, and Dr. and Mrs. Athey R. Lutz of Parkersburg.

(4) Dr. and Mrs. L. J. Pace of Princeton greet guests at the reception. Doctor Pace was named president elect of the Association.

(5) Dr. Charles L. Goodhand of Parkersburg, the newly elected vice president, is shown with Mrs. Goodhand at the Presidential Dinner.

(6) Dr. John W. Hash with Mrs. Clark K. Sleeth of Morgantown, left, and Mrs. William G. Thuss of Birmingham, Alabama.

(7) Members of the Resolutions Committee are shown following a meeting of that group. Left to right, Drs. Maynard P. Pride of Morgantown, John W. Hash of Charleston, Albert C. Esposito of Huntington and Pat A. Tuckwiller of Charleston.

(8) Miss Linda Elkin of Charleston was among the young ladies who distributed favors at the Presidential Dinner. Also in the picture are Mrs. J. Dennis Kugel of Charleston, and Dr. Philip Thorek of Chicago, one of the guest speakers.

(9) Shown at the Speaker's Table are, left to right, Dr. D. E. Greeneltch of Wheeling, Dr. Edward R. Annis of Miami, Florida, the speaker, Mrs. Greeneltch, and Dr. Leonard W. Larson, AMA President.

(10) Dr. J. P. McMullen of Wellsburg with Mr. and Mrs. Clare D. Edman. Mr. Edman was awarded the Association's 1961 four-year scholarship to the WVU School of Medicine.

(11) More than 275 persons attended the Presidential Dinner at The Greenbrier. Seated at this table were Dr. and Mrs. William R. Laird of Montgomery, Dr. and Mrs. Karl Menninger, Dr. and Mrs. James P. Baker of White Sulphur Springs, and Dr. and Mrs. Kinloch Nelson of Richmond.

Dr. William C. Morgan, Jr., Wins Medical Golf Tournament

Dr. William C. Morgan, Jr., of Charleston, won the medical golf tournament held in connection with the 94th Annual Meeting of the State Medical Association at The Greenbrier in White Sulphur Springs, August 24-26.

Doctor Morgan shot a 77 to win the first leg on the beautiful championship trophy offered by the Hospital and Physicians Supply Company of Charleston.

Dr. Joseph A. Smith of Dunbar, left, presents championship golf trophy to Dr. William C. Morgan, Jr., of Charleston, winner of the medical golf tournament held in connection with the annual meeting at The Greenbrier.

His closest rival for low gross honors was Dr. R. R. Brown of Romney, who shot a 78. Other low scorers were Drs. Eugene J. Morhous of White Sulphur Springs, 79, R. A. Crawford of Charleston, 80, Jack Leckie and K. Owens, 81, and Everett H. Starcher, 84.

Drs. George R. Callender, Jr., of Charleston, George A. Curry of Morgantown, and David W. Palmer of Wheeling tied for low net honors. Other winners in this category were Drs. T. P. Mantz of Charleston, C. A. Logue of Morgantown, Max Koenigsberg of Charleston, and Ray M. Bobbitt of Huntington.

Winners in the various categories of the tournament received useful golfing equipment purchased from funds realized from a $5 registration fee. Prizes were awarded at the Presidential Dinner on Saturday evening, August 26.

Dr. Joseph A. Smith of Dunbar served as chairman of this year's golf committee.

The man who tries to do something and fails is infinitely better than he who tries to do nothing and succeeds.—Anon.

Mrs. Vernon L. Dyer of Petersburg New Auxiliary President

Mrs. Vernon L. Dyer of Petersburg was installed as President of the Woman's Auxiliary to the West Virginia State Medical Association during the 37th Annual Meeting at The Greenbrier in White Sulphur Springs, August 24-26. She succeeds Mrs. Clark K. Sleeth of Morgantown.

More than 195 wives of physicians were registered during the three-day meeting which was held conjointly with the 94th Annual Meeting of the West Virginia State Medical Association.

Mrs. Dyer and the other newly elected officers were installed at the second general session on Friday morning, August 25, by Mrs. William G. Thuss of Birmingham, Alabama, president elect of the Woman's Auxiliary to the American Medical Association. Mrs. Dyer delivered her inaugural address at that session.

Mrs. Vernon L. Dyer

Mrs. Thuss delivered the keynote address at the opening session on Thursday morning. Another distinguished speaker was Mrs. Kalford W. Howard of Portsmouth, Virginia, president of the Woman's Auxiliary to the Southern Medical Association, who delivered an address at the second general session on Friday morning.

Address by Doctor Thorek

Another honor guest who appeared as a speaker on the Friday morning program was Dr. Philip Thorek of Chicago, who delivered an interesting and entertaining address on the subject of "Nutrition and Diet."

Doctor Thorek appeared as a speaker before the Auxiliary several years ago. During his stay at The Greenbrier, he presented papers before three other medical groups in addition to his participation in the Auxiliary program.

Auxiliary members joined their husbands and families in the Theatre for the Association's opening exercises on Thursday morning. The first speaker was Governor W. W. Barron, who presented an address on "The Problem and the Challenge."

It marked Governor Barron's first appearance at an annual meeting of the State Medical Association, and he and Mrs. Barron were guests at The Greenbrier during the full three days of the meeting.

Mrs. Weiler Named President Elect

Mrs. Howard G. Weiler of Wheeling was named president elect and will be installed as president during the 1962 meeting at The Greenbrier next August. Other new officers for the coming year are as follows:

First vice president, Mrs. John W. Hash, Charleston; second vice president, Mrs. L. Dale Simmons, Clarksburg; third vice president, Mrs. Earl S. Phillips, Wheeling; fourth vice president, Mrs. Lee F. Dobbs, Huntington; treasurer, Mrs. Andrew J. Weaver, Clarksburg; recording secretary, Mrs. John A. B. Holt, Charleston; corresponding secretary, Mrs. Fred Moomau, Petersburg; and parliamentarian, Mrs. D. E. Greeneltch, Wheeling.

Mrs. Dyer has named the following chairmen of committees to serve during her term of office:

Standing Committees

Archives and History, Mrs. N. B. Groves, Martinsburg; Finance, Mrs. Harry E. Beard, Huntington; Legislation, Mrs. A. C. Chandler, Charleston; Community Services, Mrs. Ira Connolly, Jr., Parkersburg; Membership, Mrs. Howard G. Weiler, Wheeling; Press and Publicity, Mrs. Joe N. Jarrett, Oak Hill; Program, Mrs. George A. Curry, Morgantown; Editor, State News Bulletin, Mrs. Clark K. Sleeth, Morgantown; Circulation Manager, News Bulletin, Mrs. H. A. Shaffer, Morgantown; By-Laws and Handbook, Mrs. William A. Thornhill, Jr., Charleston; Southern Medical Councillor, Mrs. J. C. Huffman, Buckhannon; National Bulletin, Mrs. William T. Lawson, Fairmont; Members-at-Large, Mrs. Hu C. Myers, Philippi; and American Medical Education Foundation, Mrs. Grover C. Hedrick, Jr., Beckley.

Special Committees

Convention, Mrs. Lyle T. Veach, Petersburg, and Assistant, Mrs. Thomas E. Bess, Keyser; Necrology, Mrs. George L. Lemon, Lewisburg; Health Careers, Mrs. C. L. Terlizzi, Huntington; Safety and Civil Defense, Mrs. Carter Cort, Fairmont; Mental Health, Mrs. Robert J. Tchou, Williamson; Nutrition and Rural Health, Mrs. Lynwood D. Zinn, Clarksburg; and Liaison to Woman's Auxiliary, Student American Medical Association, Mrs. L. Dale Simmons, Clarksburg.

Executive Board

Two past presidents of the Auxiliary, Mrs. Robert R. Pittman of Marlinton and Mrs. Clark K. Sleeth of Morgantown, have been appointed by Mrs. Dyer to serve as members of the Executive Board.

Advisory Board

Dr. D. E. Greeneltch of Wheeling, president of the West Virginia State Medical Association, has named the following Advisory Board to the Woman's Auxiliary:

Dr. J. C. Huffman, Buckhannon, Chairman; and Drs. Carl B. Hall, Charleston; Seigle W. Parks, Fairmont; Clark K. Sleeth, Morgantown, and Vernon L. Dyer, Petersburg.

New President Native West Virginian

Mrs. Vernon L. Dyer, the new president, is a native West Virginian, having lived her early life in the Ohio Valley section and her later life at Petersburg in the Potomac Valley where Doctor Dyer has practiced medicine for more than 42 years.

She was graduated from Western Maryland College and has served as a substitute teacher at Petersburg High School.

Dr. and Mrs. Dyer have two children and five grandchildren. The daughter, Mrs. John G. Oliver, lives in Pen Argyl, Pennsylvania, where her husband is engaged in the general practice of medicine. The son, Dr. John A. Dyer, received his M. D. degree from the University of Pennsylvania School of Medicine and is now a member of the staff of the Department of Ophthalmology at the Mayo Clinic in Rochester, Minnesota.

Mrs. Dyer has been active in civic and community affairs and is a Presbyterian. She has served as president of the Presbytery's and Synod's Women of the church organizations. As Synodical President, she served as chairman of the Women's Advisory Council for Women's Work in the Presbyterian Church U. S. She is interested in the summer conference grounds at Massanetta Springs and is a member of the board of directors.

She is a member of the Woman's Auxiliary to the Potomac Valley Medical Society and served a term as president. In the state organization, Mrs. Dyer served as state legislative chairman and a term as first vice president prior to being named president elect in 1960.

In addition to medical auxiliary work, she is active in voluntary work at the new hospital in Petersburg and served a term as president of the hospital auxiliary.

Mrs. Dyer has traveled extensively both in the United States and abroad, and she enjoys swimming, fishing and other outdoor sports.

Post-Convention Conference

Mrs. Dyer presided at the post-convention conference and meeting of the Executive Board on Saturday morning, August 26. Plans for the coming year were discussed and the members of the Advisory Board to the Auxiliary were introduced.

Dr. and Mrs. Leonard W. Larson were among the guests attending the morning session. Doctor Larson, the AMA president, spoke briefly before the group.

Entertainment Program

A capacity crowd composed of members and guests attended a luncheon and fashion show which was held in the Crystal Dining Room on Friday. The new fall fashions were shown by the Floradora Shoppe of Morgantown.

Newly elected officers of the Woman's Auxiliary to the WestVirginia State Medical Association are shown together following their election at The Greenbrier. Seated, left to right, Mrs. Howard G. Weiler of Wheeling, president elect; Mrs. Vernon L. Dyer of Petersburg, president; Mrs. Andrew J. Weaver of Clarksburg, treasurer; and Mrs. John A. B. Holt of Charleston, recording secretary. Standing, left to right, Mrs. John W. Hash of Charleston, first vice president; Mrs. L. Dale Simmons of Clarksburg, second vice president; Mrs. Earl S. Phillips of Wheeling, third vice president; and Mrs. D. E. Greeneltch of Wheeling, parliamentarian.

Prizes to winners in the golf and tennis tournaments were awarded at a Cabaret Dance which was held at the Casino on Friday evening.

Program Committees

Mrs. Robert J. Nottingham, formerly of Morgantown and who is now residing in Denver, Colorado, served

State, regional and national Auxiliary officers are shown together at The Greenbrier during the annual meeting. Left to right, Mrs. Vernon L. Dyer of Petersburg, president of the State Auxiliary; Mrs. William G. Thuss of Birmingham, Alabama, president elect of the AMA Auxiliary; Mrs. Kalford W. Howard of Portsmouth, Virginia, president of the Southern Medical Association's Auxiliary; and Mrs. Clark K. Sleeth of Morgantown, immediate past president of the State Auxiliary.

as convention chairman and she was assisted by Mrs. Robert J. Fleming of Morgantown.

Mrs. Dyer has appointed Mrs. Lysle T. Veach of Petersburg as the 1962 convention chairman, and Mrs. Thomas E. Bess of Keyser, co-chairman.

Fall Conference at Moorefield

The Auxiliary's 1961 Fall Conference and Board of Directors' meeting will be held at the Hotel McNeill in Moorefield, October 11-12. Dr. D. E. Greeneltch of Wheeling, president of the State Medical Association, will be among the honor guests.

Symposium on Cosmetic Problems

The Committee on Cosmetics of the American Medical Association will sponsor a Symposium on Cosmetic Problems in General Practice in conjunction with the Annual Meeting of the Southern Medical Association in Dallas, Texas, on November 8.

Dr. Stephen Rothman of Chicago, professor emeritus of dermatology at Argonne Cancer Research Hospital, AEC, the University of Chicago, is chairman of the AMA Committee and will preside at the meeting in Dallas.

Sections and Affiliated Societies Elect Officers for 1961-62

Meetings of sections and affiliated societies and associations of the West Virginia State Medical Association were held during the 94th Annual Meeting at The Greenbrier, August 24-26.

All of the guest speakers on the general scientific program participated actively in the afternoon meetings. The meetings were well attended, especially those for which a scientific program had been arranged.

Sections

The following is a list of officers of sections, societies and affiliated associations who will serve during the coming year:

Internal Medicine: Richard V. Lynch, Jr., Clarksburg, President; and George F. Evans, Clarksburg, Secretary.

Neurology, Neurosurgery and Psychiatry: Thomas J. Holbrook, Huntington, President; James B. Nichols, Jr., Charleston, President Elect; and Roy A. Edwards, Jr., Huntington, Secretary-Treasurer.

W. Va. Academy of Oph. and Otol.: Albert C. Esposito, Huntington, President; William K. Marple, Huntington, President Elect; James T. Spencer, Charleston, Vice President; and Worthy W. McKinney, Beckley, Secretary-Treasurer.

Orthopedic Surgery: Earl A. McCowen, South Charleston, President; and L. S. Miller, Morgantown, Vice President.

W. Va. Association of Pathologists: David B. Thornburgh, Parkersburg, President; E. E. Myers, Philippi, President Elect; and J. Evan Sadler, Huntington, Secretary-Treasurer.

W. Va. Pediatric Society: Grover C. Hedrick, Jr., Beckley, President; Thomas G. Folsom, Huntington, Vice President; and W. W. Currence, South Charleston, Secretary-Treasurer.

W. Va. Radiological Society: Hubert A. Shaffer, Morgantown, President; Rex Dauphin, Parkersburg, Vice President; and Karl J. Myers, Philippi, Secretary-Treasurer.

Surgery: A. Kyle Bush, Philippi, President; and W. W. Strange, Huntington, Secretary.

Urology: Thomas B. Baer, Bluefield, President; E. Burl Randolph, Clarksburg, Vice President; and Donald R. Gilbert, Charleston, Secretary-Treasurer.

Societies

W. Va. State Society of Allergy: M. D. Reiter, Wheeling, President; W. L. Neal, Huntington, Vice President; and Merle S. Scherr, Charleston, Secretary-Treasurer.

W. Va. Society of Anesthesiologists: Harry S. Weeks, Jr., Wheeling, President; Newman H. Newhouse, Charleston, Vice President; and W. H. Rardin, Beckley, Secretary-Treasurer.

W. Va. Ob. and Gyn. Society: John T. Chambers, Charleston, President; Frederick H. Dobbs, Charleston, Vice President; and A. J. Villani, Welch, Secretary-Treasurer.

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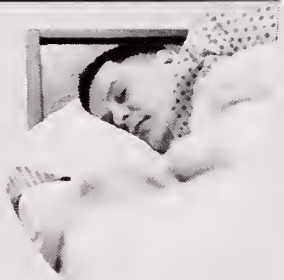

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Research in the Service of Medicine

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–News–

Dr. Joseph M. Quintero, an expatriate of Cuba, has accepted appointment as Assistant Professor of Medicine and Chairman of the Division of Allergy at the West Virginia University School of Medicine. The appointment was announced by Acting University President Clyde L. Colson.

Joseph M. Quintero, M. D.

Doctor Quintero, who has been serving during the past year as visiting investigator in mycology and allergy at the University of Puerto Rico, will join the staff later this month. He has done original research in his field and is author of numerous scientific articles which have appeared in professional journals.

He is first vice president and a former secretary-general of the International Association of Allergy, as well as a former president of the Cuban Allergy Society.

Doctor Quintero left Cuba in 1960 after almost 20 years' service in teaching and research, first on the faculty of the University of Havana and more recently with the Cuban Medical Association. From 1945 to 1960, he was Chief of the Allergy Department of the Cuban National Council of Tuberculosis and Public Health Administration.

A native of Pinar Del Rio, Cuba, Doctor Quintero received his M. D. degree at the University of Havana Medical School and served his internship at Havana University Hospital. He is a Fellow of the American Academy of Allergy and the American College of Allergists.

Staff Appointments Announced

Dr. William A. Welton, a native of Fairmont, has been appointed instructor and chairman of the Division of Dermatology at the School of Medicine. He joined the staff on September 1.

Doctor Welton, who has been serving as a member of the faculty at Temple University School of Medicine, was graduated from West Fairmont High School and attended the University for two years. He was graduated from Harvard University and received his M. D. degree from the University of Maryland School of Medicine in 1954.

• **Compiled from material furnished by Cletis Pride, Public Information Officer, West Virginia University Medical Center, Morgantown, W. Va.**

He served a residency in dermatology at Roosevelt Hospital in New York City, and served with the Medical Corps of the United States Navy, 1957-59. He is co-author of the book, "Granulomatous Dermatoses."

New Instructor in Surgery

Dr. Richard A. Currie of Utica, New York, has joined the faculty of the School of Medicine as instructor in surgery. He is teaching general surgery and doing research in thoracic and cardiovascular surgery.

Doctor Currie received his M. D. degree and a master of surgery degree from McGill University in Montreal, Canada. He served a residency at Massachusetts General Hospital in Boston and served for two years with the Medical Corps of the United States Army. He served as associate chief of surgery at Beckley Memorial Hospital from 1957 until 1960.

He is a Fellow of the American College of Surgeons and is certified by the American Board of Surgery. While in West Virginia, he was a member of the Raleigh County Medical Society, State Medical Association and American Medical Association.

Research Grant

Dr. Margaret Albrink, who joined the faculty of the School of Medicine on July 1 as associate professor of medicine, brought with her a $25,850 grant to continue her investigations into the relationship of a type of blood fat and heart disease. Sponsored by the National Institutes of Health, the grant supports a study entitled "Serum Triglycerides in Coronary Artery Disease."

Doctor Albrink said the grant will be used to employ laboratory technicians and purchase supplies, preparatory to setting up a triglyceride testing program in this area. Meantime, she is continuing her participation in a similar program at Yale University, where she was engaged in the same type of research before coming to the University.

She is an established investigator of the American Heart Association and is supported professionally by a continuing grant from that organization. She is author of numerous papers and articles on the relationship of serum lipids to heart disease.

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The Month in Washington

• From the Washington Office of the American Medical Association.

THE Senate and House approved a multi-million dollar expansion of federal aid to community health services. The Senate approved it by routine voice vote a few weeks before adjournment. The House earlier had approved a slightly different form of the legislation. No difficulty was anticipated in adjusting the differences of the two versions so that it could become effective at an early date.

Some of the programs covered by the legislation were of special importance to the aged and the chronically ill. Key provisions of the bill would:

(1) Raise from $30 to $50 million, for five years the annual authorization for matching grants to states and cities for public health services such as home nursing, home health care and a variety of services to nursing homes.

(2) Establish a five-year $10 million-a-year program of special grants to non-profit groups for research and development aimed at improved health services given outside the hospital.

(3) Raise from $10 million to $20 million the annual authorization for construction of public and non-profit nursing homes.

(4) Extend loan provisions for hospital construction under the Hill-Burton Act until its grant program expires in June 1964.

(5) Raise from $1.2 million to $10 million the annual ceiling on grants for hospital research and permit grants for experimental or demonstration hospital units.

(6) Extend for three years the matching grant program which provides federal help for construction of health research facilities and authorize $50 million rather than $30 million a year.

Influenza Epidemic Predicted

Dr. Luther L. Terry, Surgeon General of the U. S. Public Health Service, predicted that there will be a new influenza epidemic in the United States this fall and winter.

He urged immediate vaccinations for people over 65, pregnant women and persons with heart diseases and other chronic illnesses.

"We are probably due for some Asian flu outbreaks, since they come in two or three year cycles," Doctor Terry said, "and we are overdue for type B flu outbreaks which come in four to six-year cycles."

More than 86,000 people in the three most susceptible groups died from influenza between September 1957 and March 1960. Asian flu has been dormant in this country since then. It has been more than six years since type B flu has been widespread.

Both types of flu were prevalent in other countries in 1960-61, especially in England. In 1951, when England had a similar epidemic, flu reached this country the following year, Doctor Terry noted.

The U. S. Public Health Service is alerting physicians, state health officers and welfare agencies to include flu shots in their programs of public assistance.

Live Virus Polio Vaccine Licensed

The Type I oral, live virus polio vaccine developed by Dr. Albert Sabin has been licensed by the U. S. Public Health Service for marketing in the United States.

However, the PHS, the American Medical Association and others urged that the widest possible use still be made of the Salk killed vaccine. The principal use of the newly licensed oral vaccine this year will be against epidemic threats of Type I polio.

The license for manufacture of the oral vaccine was granted to Pfizer, Ltd., Sandwich England, and it is being marketed in this country by Chas. Pfizer & Co., Inc., of New York.

Dr. Luther L. Terry, Surgeon General of the PHS, said he expected Type II oral vaccine to be licensed soon but that it would be several months before Type III would be licensed.

Pfizer is expected to have more than 50 million doses of the Type I oral vaccine available for use by next spring at the start of the 1962 polio season. For an epidemic reserve, the PHS ordered at the time of the licensing a total of 900,000 doses of the Type I vaccine in frozen form at a cost of $81,000.

Information on the terms for obtaining vaccine from this epidemic reserve was sent to state and territorial health officers. The requirements include:

At least three cases of Type I polio in the community within a month, of which two have been confirmed to be Type I by laboratory analysis.

Adequate community organization and medical leadership to insure rapid and complete coverage of the population under 50.

Agreement to make the vaccine available without charge to persons under 50.

All local requests must be channeled through state health departments.

Annual Reports*

Medical Economics Committee (Special Report)

The MAA program was placed into effect in West Virginia on October 5, 1960, when the Legislature, in special session, accepted the provisions of the federal Kerr-Mills Bill. The Legislature enacted very few specific provisions but delegated the preparation of regulations and fee schedules and general administration and supervision of the program to the State Director of DPA; now as of July 1, 1961, designated as the Department of Welfare.

Under regulations set up by the DPA Director, 30 days annual hospitalization; home, office and hospital calls by a physician; certain x-ray and laboratory diagnostic services; outpatient diagnostic services, drugs, ambulance and limited dental services were offered to all citizens over 65 years of age whose net annual income was $1,500 or less. The applicant could own real estate, personal effects, jewelry, cash surrender values of life insurance without any fiscal limitation, and he could own an automobile which was valued at $1,500 or less, and yet be fiscally eligible for such medical care needed for any acute medical or surgical condition, or acute exacerbation thereof. The fees for such medical and for hospital and ancillary services were to be determined by the DPA Director.

On October 6, 1960, without consultation or advice from any outside sources, the Director ordered that the fee schedules used for OAA clientele would be in effect for MAA patients. He was given $1,207,256 of state funds, together with matching funds of $4,420,564 from the federal government to expend for MAA services during the period of October 5, 1960 to March 31, 1961.

At a meeting of the Council held on October 13, 1960, these matters were considered and the Chairman of the Committee, the President, and the Executive Secretary were directed to negotiate with the DPA Director to the end that a realistic fee schedule be realized. The negotiators approached the Director with a schedule based upon 75 per cent of the standard Plan A contracts of Blue Shield in Huntington, Charleston and Wheeling. By mid-December the Director had apparently accepted this schedule, but on December 22, 1960, Mr. Egbert, in a telephone call to your chairman, stated that anesthesia and house calls would be set at a lower level, and that we "could take it or leave it." Later the fees for home visits were raised to the original level. The fees for anesthesia and radiology have been discussed at length with the present Director of Welfare, and his decision is expected at any moment. Your committee has also conducted a study upon actual cost of radiologic services and on August 11, 1961, a schedule of radiologic fees for MAA patients, based upon this study and combined with a relative value index, was handed to the Director for his consideration.

On May 12, 1961, the Director of Welfare published certain revisions in the conditions for fiscal eligibility of MAA clients. In this directive he stated that cash surrender value of life insurance would be added to the other liquid assets, and if the total amount was $5,000 or less for one person or $7,500 for man and wife, the person would be eligible for MAA. He also directed that real estate, other than homestead property, valued at $15,000 or less per person or at $20,000 for man and spouse, would provide eligibility for MAA benefits. Previously there had been no limit on such resources.

No doubt, there is interest in what has happened to date in the operation of MAA. Here are figures on usage and costs:

	Applications	*Approvals*	*Treated*	*Expenditures*	*Cost per Patient*
Jan.	2,546	2,319	1,053	$81,384.64	$77.00
Feb.	2,735	2,154	1,783	153,867.79	88.00
Mar.	3,655	3,286	2,866	208,536.67	74.00
April	3,451	3,425	3,617	235,002.62	65.00
May	3,652	3,215	5,371	341,875.65	64.00
June	3,222	3,021	6,060	391,859.82	64.00
Total	19,261	17,420	20,750	1,412,527.19	72.00

Because of flood damage to IBM equipment, we have no breakdown for the first full six months operation, but for the first quarter we have these figures available.

Hospitalization		$319,754.70
MD	70,021.08	
DO	3,142.40	
Dentists	479.00	
Optometrists	213.10	
Pharmacists	41,178.04	
Ambulance	3,244.50	
Nursing Homes	1,507.79	
Opticians	2,463.77	
Miscellaneous	1,784.72	$124,034.40
Quarterly totals		$443,789.10

Average hospital stay per patient hospitalized 12.0 days.

Average hospital cost per patient hospitalized 247.28 per patient hospitalized.

Average medical/surgical cost per patient 19.28.

These figures reflect certain interesting factors:

(1) There is an increase of approximately 1000 patients under treatment in each of the first six months.

(2) The average length of hospital stay per patient compares very favorably with the national average for all age groups (7.7 days), when we consider that plus 65 patients ordinarily require about 2½ times the hospital stay over those under 65.

*Other annual reports were published in the August, 1961, issue of The Journal.

(3) The hospitals are faring very well, financially speaking, with an average daily income of $20.58 per patient.

(4) The average medical/surgical cost per patient treated, $19.28, reflects (a) that most of the services rendered to date are in home or office, (b) the possibility of increased per patient costs when the surgical aspects of the program are developed further.

We are informed by the department statistician that cost figures for the months of April, May and June will follow very closely those of the first quarter.

Your Committee wishes to repeat the statement made at the June, 1961, Council meeting. "Let the public and the Legislature know that we are not entirely satisfied with the present MAA program, which can, and should be improved by providing voluntary prepaid hospital and medical care contracts, with a contribution from each beneficiary according to his means, toward the premium costs thereof, with the balance of premiums paid out of general tax funds."

The officials of the State Welfare Department are somewhat concerned about the mounting usage and costs of the MAA program. It is interesting to note that in a brief review of some hundred medical care vouchers, the diagnosis recorded by the attending physician, could not be reconciled with the regulatory eligibility requirements of acute illness or exacerbation thereof. For instance, there must be some doubt as to the equity of a charge for one office call plus certain drugs for a patient whose diagnosis was recorded as "hypertension" without any mention of the degree of activity or exacerbation. Similar conditions prevailed in a goodly number of the other vouchers studied.

Your Committee is still concerned with (1) an increase in anesthesiology fees to the level originally requested; (2) a more realistic fee schedule for radiology, and (3) an increase to $3.75 for hospital visits. During the past year two studies have been conducted in the matter of actual costs of radiologic services per patient and in a study of what is known as a "relative value index". In brief, a relative value index simply determines the unit value of each of the types of services rendered in the different categories of medical practice—for instance the index varies between medical and general surgery, or between orthopedic and urologic services. This index is already in use in California and other states; it has been approved by the Committee on Medical Services of the AMA, and at the present moment the national Blue Shield plans are adopting this index for use in negotiating national contracts. Although not primarily intended for such use, the relative value index can be well used in the determination of established fee schedules and for the individual physician's information in determining his personal fees. This system is developing very rapidly in the several states, and promises to be in more general use in the foreseeable future. Your Committee requests approval for continued study as it might apply to our state, with a possible approach in one of the present state bureaus, for instance, the State Compensation Commission, leading to the adoption of a relative value index in preparation of their fee schedules. Your Committee is recently in receipt of certain complaints from a group of physicians regarding the general procedures and fees for state compensation commission practice. It will be given thorough study with recommendations to follow at a later date.

Your Committee has suggested to the State Welfare Department the advisability of appointing Medical Review Boards in the several communities in the state, selected for availability of physicians qualified in the various specialties, the availability of convenient hospital clinic facilities, and at locations which will not require undue travel by patients. The personnel of these Boards will be recommended by the component medical societies, appointed by the Director of Public Welfare, and will serve on a per diem consultation fee basis. Their purpose will be the review of the medical history of every public assistance client who receives payment because of mental or physical disability. Necessary examination procedures will be conducted, together with indicated laboratory studies, and the medical reports will be forwarded to the Department of Welfare for adjudication. It is expected that such procedures will further improve the status of deserving persons, and will assist in removing from the public assistance rolls those persons not entitled to the benefits thereof. The first such program will be established in Kanawha County and will be extended to all areas of the state in the near future. Your Committee seeks approval for this long-needed improvement in our welfare program.

This report is closed with a brief review of complaints received in regard to the MAA program to date.

A number of physicians have demanded the right to charge fees over and above the established schedule, when in their own personal judgment the patient and/or his relatives can so afford. It should be remembered (1) that the MAA program was developed for elderly persons with limited income; (2) there are certain to be specific inequities in such a program, administered by laymen, especially in its formative stages; (3) the first paragraph in the Regulations and Fee Schedule very definitely states "the fee allowed shall represent payment in full for the services rendered." Under these conditions, any physician has the privilege of refusing to accept any patient for treatment, but if the physician does accept the eligible patient, he must also accept the fee allowed; and (4) one more phase of this matter should be mentioned—if every individual physician was granted the privilege of determining the fiscal status of each of these MAA patients, together with that of the patient's relatives, the determination might well result in a confused and disturbing state, not consistent with the highest ideals of our profession.

There have been a few complaints concerning radiologic and anesthesia fees. As stated previously, an increase in these fees has already been requested and a decision is expected soon.

The only complaints received by the Department of Welfare from patients concerning physicians are related to a few cases where the physician has charged additional fees over and above the published schedule.

The chairman wishes to thank the individual members of the Committee, the President and Executive Secretary of the State Medical Association for their faithful and sustained activities and interest during the past year. The Committee is grateful for the confidence and trust shown by the members of the Association, and for the authority granted us during negotiations and development of a program, which, although not complete, is certain to become increasingly extensive in the years to come.

Respectfully submitted,

James S. Klumpp, M. D.
Chairman

White Sulphur Springs
August 23, 1961

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Insurance Committee
(Retirement Investment Program)

As practicing physicians few of us have the time, patience or skill to set up an adequate investment or retirement program. Most of us earn enough during the peak years of our practice to adequately provide for the years ahead; however, few of us arrive at this time with a satisfactory investment program. Nor have we usually obtained optimum return on the money invested.

Industry has long recognized the problem of investment for retirement and it found a solution. Employee retirement pension funds are now an accepted part of corporate operation. Many of our patients are the recipients of these retirement plans.

Following the pattern set by industry, several state associations have worked out plans designed along the same general lines developed by industry. The state medical societies of Colorado, Florida and Mississippi have already adopted such programs. North Carolina and Texas have plans under consideration. Many associations in other fields have done so. The West Virginia Bankers Association here in the state operates a retirement pension plan for the benefit of their members

Operation of Other Association Plans

In broad general principle, the Investment and Retirement plans of other associations operate as follows:

The funds of participating members are deposited with a qualified trustee (usually a bank). Under the terms of a trust agreement the funds so deposited are invested in a diversified list of stocks and bonds, or invested in a retirement annuity with an insurance company, or a combination of these two. The participating member is given a choice of the foregoing alternatives.

By going together and pooling their savings, the participants secure qualified investment management and a share in a diversified investment program of stocks and bonds—at a minimum cost for the service rendered. For most of us, diversification of investment plus qualified investment management is impractical and too costly to be undertaken on an individual basis. Furthermore, in examining programs of other state societies, it is apparent that the unified approach makes available Special Life Pension Contracts with far more liberal underwriting than would be available ordinarily to the individual.

Another point which gives added purpose to the formalized investment trust is proposed legislation now pending in Congress—(the Keogh type bill). It provides for a tax deduction on contributions to an approved trust and a tax deferment for earnings on such contributions made by the trust. Any possible retroactive provision of such legislation may allow additional tax advantage to plans in existence at the time such legislation is enacted into law.

Retirement Investment Trust

Following a thorough study of the plans and operation of other associations and societies and being convinced that properly designed and properly presented, a Retirement Investment Trust will fulfill a real need for members of our Association, the Insurance Committee unanimously recommends that the State Medical Association sponsor such a program for the benefit of our members.

It is recommended that a five member committee be appointed to formulate such a program and be empowered with the necessary authority to put it into effect.

It is further recommended that this committee observe the following general designs and operation of the program.

A Plan Coordinator shall be appointed to coordinate the program, furnish technical advice, and make such studies as the committee shall direct.

A bank shall be selected and appointed to act as Trustee.

A trust agreement shall be drawn defining the responsibilities and duties of the trustee, both as custodian of the funds and as manager of the portfolio of investments.

The plans offered participating members under the Trust shall provide the following four options available to participating members:

Plan I—will provide that funds deposited with the trustee shall be used to purchase unit share in the stock and bond investment fund operated and managed by the trustee for the benefit of the shareholders.

Plan II—will provide that funds deposited with the trustee shall be invested in a Special Life Pension insurance policy—obtained under the special underwriting advantages available through the United Trust Program.

Plan II-A—will provide that funds deposited with the trustee shall be invested in a Special Pension Annuity policy (a pension plan without life insurance benefits).

Plan III—is a combination of plans one and two. It will provide that funds deposited with the trustee shall be divided. One portion shall be used to purchase shares in the investment fund and the other portion shall be invested in a Special Life Pension policy.

Plan III-A—is a combination of plans one and two-A. Funds deposited with the trustee will be divided. One

portion shall be used to purchase shares in the investment fund and the other portion shall be invested in a Special Pension Annuity—(if he does not qualify for the Special Life Pension policy).

Plan IV—is a duplicate of plan one—designed to permit members financially able and interested in making additional investment in the Investment Fund—the minimum annual deposit is $300 per year; the maximum is $2,500 per year.

Appointment of Plan Coordinator

On the subject of a Plan Coordinator it should be explained that in accomplishing the ground work of investigation and preliminary formulation of plans, a substantial amount of study, research and technical assistance has been required. Our committee called upon the firm of McDonough-Caperton-Shepherd-Goldsmith of Charleston, whose experience and qualified knowledge of pension trusts proved a necessary essential in the accomplishment of our study.

The Insurance Committee recommends without reservation the appointment of McDonough-Caperton-Shepherd-Goldsmith as Plan Coordinators for the Retirement Investment Trust. In this capacity they will continue to act as technical guide in the design and operation of the program. They will be compensated for their services by acting as Agent of Record in the placement of Life Pension policies and Pension Annuities. In this capacity it will be their duty to contact life insurance companies and, with approval of the committee, appoint the company best qualified to fill the specifications and services required.

As most of you know, McDonough-Caperton-Shepherd-Goldsmith has competently served the Association for fourteen years as Administrators of the Association's Group Disability Insurance Program. Their knowledge of the operation of our Association and their general acquaintance of the membership will be of substantial value when the time comes to present the plan to our members for participation.

Respectfully submitted,

Charles A. Hoffman, M. D.,
Chairman

White Sulphur Springs
August 23, 1961

* * * *

Necrology Committee

The following is a list of West Virginia physicians whose deaths have been reported to the West Virginia State Medical Association during the past year:

1960

Aug.	19—A. W. Crews	Fort Worth, Tex.
Sept.	15—Claude B. Smith	Charleston
Sept.	20—George W. Johnson	Beckley
Oct.	15—Merwyn Blanchard Moore	Huntington
Oct.	19—Harry Kight Owens	Elkins
Oct.	27—Archibald Perrin Hudgins	Charleston
Oct.	29—Boylston Dandridge Smith	Man
Oct.	30—Gustavus Benz Capito	Charleston
Dec.	6—Robert E. Davis	Parkersburg
Dec.	15—Walton L. Strother	Salem
Dec.	18—Henry C. Davis	Bluefield
Dec.	20—Coy Tillman Upchurch	Oceana
Dec.	21—James Marshall Skinner, Jr.	N. Martinsville

1961

Jan.	3—Harold E. Troup	Bluefield
Jan.	4—James Lowrance Wade	Parkersburg
Jan..	13—David French Pauley	Jeffrey
Feb.	14—Robert Carson Fugate	Bluefield
Mar.	27—Herbert M. Coleman	Iaeger
Apr.	5—Sixtus Gary Zando	Williamson
Apr.	8—William Calvin Camp	Spencer
Apr.	15—Charles Kermit Dilley	Marlinton
Apr.	29—Solomon G. Moore	Stephens City, Va.
May	20—Robert Wriston	Beckley
June	1—R. L. Hunter	Whitesville
June	6—George D. Johnson	Huntington
June	11—Theresa O. Snaith	Weston
June	14—Worth B. Forman	Pittsburgh, Pa.
July	27—Charles E. Watkins	Oak Hill
July	30—C. C. Jackson	East Rainelle
July	31—Will A. Quimby	Wheeling
Aug.	1—George W. Phillips	Morgantown
Aug.	13—Frank Freeman Sowers	Fairmont

Respectfully submitted,

J. W. Hesen, Jr.,
Chairman

White Sulphur Springs
August 23, 1961

* * * *

Conservation of Vision and Hearing

The Committee's work during the year has been varied but especially productive in the field of public relations and public health. Activities have been integrated with the West Virginia Academy of Ophthalmology and Otolaryngology inasmuch as the chairman also served as chairman of the Academy's Projects Committee.

The year began with establishment of a high degree of liaison with the West Virginia Lions Sight Conservation Foundation. A manual to govern relationships of the Foundation with the state's eye specialists was adopted by both groups. The ophthalmologists have been consulted and have exerted much beneficial influence in the direction of the Sight Foundation projects during the year.

Results of the friendly collaboration with the Lion's group have been:

(1) Organization of a statewide program of eye screening among students in the public schools. Six counties were covered completely by two nurses during the last school year. Many other counties requested the free service but the Lions Sight Foundation funds were inadequate to proceed further at that time.

(2) A pilot program of pre-school eye screening is being carried out in Monongalia County by one of the Lions Sight Foundation nurses this summer.

(3) The Foundation made a gift of $2,400 to the West Virginia University School of Medicine to equip an eye clinic.

(4) Thermos type shipping containers were placed in a hospital in every city of considerable size in the state. These are to be used for shipping enucleated eyes to the various eye banks for corneal transplant and other purposes.

(5) The ophthalmologists collaborated with the Lions Sight Conservation Foundation in securing passage of a bill to enable any person legally to give his eyes for corneal transplant or other scientific purposes at the time of his death. This removes the delay incident to securing permission of the next of kin before enucleation. The law requires that the deceased have signed a statement of his wish to donate his eyes, the statement to carry the signatures of two legal witnesses.

(6) The ophthalmologists carried out the second annual glaucoma screening survey at the West Virginia Lions state convention in Clarksburg in June. This has become very popular with the Lions and will probably be requested again in 1962.

(7) The Lions Sight Conservation Foundation has made exploratory moves toward financing an eye bank in West Virginia. They would expect such a bank to be organized and operated by Ophthalmologists.

The Committee on Conservation of Vision and Hearing and the Academy of Ophthalmology and Otolaryngology distributed a mimeographed letter to the delegates at the West Virginia Civitan State Convention at Clarksburg in June. They were urged to consider a statewide project of testing the hearing of children in West Virginia schools. The Wheeling Civitan Club had initiated this work by screening the hearing of all the students in Ohio County schools during the last school year. The work was carried out by a nurse under the supervision of a Wheeling otolaryngologist.

The Civitans accepted this as a statewide project and are now setting up an organization to begin hearing testing in the schools. It will get underway as fast as funds and organizational difficulties will permit. Nurses will be employed to make the tests which will be under the direction of otolaryngologists.

The West Virginia Society for the Prevention of Blindness, affiliated with the national organization, has been organized with aid and advice from members of the Academy. This organization, with headquarters in Charleston, is now campaigning for membership.

The members of the Committee feel that a good start has been made in some of the more urgent aspects of vision and hearing conservation in this state. It is hoped that future committees will continue and amplify this work, especially in the fields of public relations and public health. Few informed persons will doubt the serious need for more organized effort in vision and hearing conservation, particularly in the schools and industry, and also in geriatric care.

Respectfully submitted,

Ralph W. Ryan, M. D.,
Chairman

Morgantown, West Virginia
August 23, 1961

Resolutions

Two resolutions offered at the first session of the House of Delegates on Wednesday evening, August 23, 1961, were referred to the Committee on Resolutions for study and report back, with recommendations, at the final session on Saturday afternoon, August 26.

Dr. Pat A. Tuckwiller of Charleston, the Chairman, presided at a meeting of the Committee which was held on Thursday afternoon, August 24. Other members participating in the meeting were Drs. A. C. Esposito, Huntington; Maynard P. Pride, Morgantown; and William H. Lively, secretary ex officio. In addition to the Committee members, several physicians appeared before the Committee at the opening hearing.

Resolution No. 1 was amended by the Committee and Resolution No. 2 was substituted for the original. The resolutions, adopted by the House, follow:

Resolution No. 1. Enactment of a Medical Examiner's System in West Virginia—By the Kanawha Medical Society.

WHEREAS, The West Virginia State Medical Association, with the cooperation of the West Virginia Association of Pathologists and other interested groups, sponsored a bill in the 1961 session of the Legislature providing for the creation and maintenance of a Medical Examiner's System in West Virginia; and

WHEREAS, Although the spokesmen for the group favoring passage of the measure were accorded respectful hearings by the Judiciary Committees in the Senate and House, and the bill was subsequently passed by the House during the final days of the session with no action taken by the Senate, and

WHEREAS, The members of the West Virginia State Medical Association still feel strongly that the establishment of such a system would be in the best interests of the citizens of West Virginia:

NOW, THEREFORE, BE IT RESOLVED, That the House of Delegates of the West Virginia State Medical Association again approve the establishment of a Medical Examiner's System in West Virginia and urge the Council and the Legislative Committee to have the bill reintroduced in and seek its passage at the regular session of the Legislature as soon as possible, and,

BE IT FURTHER RESOLVED, That every effort be made by the Council to enlist the support of members of the Legislature and other interested professional and business groups for the passage of the bill.

* * * *

Resolution No. 2. Concerning the Medical Aid for the Aged Program in West Virginia—By the Kanawha Medical Society (Committee Substitute).

WHEREAS, in full knowledge and belief that the Medical Assistance to the Aged Program now in effect in the State of West Virginia is a progressive step in the development of a complete and equitable program intended to provide adequate medical hospital care for the low-income group of older citizens, and in recognition of the fact that certain inequities in its administration still exist,

THEREFORE BE IT RESOLVED, by the House of Delegates of the West Virginia State Medical Association, That the officers of the Association and the Committee on Medical Economics thereof be instructed and empowered to conduct further consultation and negotiations with the Department of Welfare to the end that (1) a thoroughly realistic fee schedule for services rendered in all branches of medical practice be established, (2) that a fair, definite and more stringent basis of fiscal eligibility be determined and placed in operation at once and, (3) that a study be made of the feasibility of requiring each beneficiary of the MAA Program to make some payment toward the cost of his or her medical and hospital services in accord with his or her means,

BE IT FURTHER RESOLVED, That the Governor of the State, the Board of Public Works, and the Legislature be notified of our desire and willingness to cooperate and advise with them in the efforts to further such a program based upon justice and consideration for all parties concerned.

* * * *

Resolution Concerning Cuban Physicians

At the request of Dr. P. A. Tuckwiller of Charleston, Chairman of the Committee on Resolutions, and by unanimous consent of the members of the House of Delegates, the following resolution was offered and adopted during the second session:

(Prior to adoption of the resolution, the House of Delegates amended the resolution by adding the following sentence to the resolving clause: "Nothing in this resolution shall be construed as an effort or desire on the part of the West Virginia State Medical Association to alter or to change in any manner the Medical Practice Act or the regulations of the Medical Licensing Board of West Virginia concerning the licensure of foreign medical graduates.")

Resolution No. 3. Concerning Exiled Cuban Physicians—By Edwin M. Shepherd, M. D.

BECAUSE OF THE FACT, That some six hundred of our Cuban medical colleagues have been tyranically compelled to leave their country, and are now temporarily domiciled in Miami, Florida, where many of them are seeking any type of employment as a means of support during their temporary exile, and,

BECAUSE OF THE FACT, That in many parts of our country there is a shortage of physicians, both in the areas of private practice and in hospital staffing,

THEREFORE BE IT RESOLVED, by the House of Delegates of the West Virginia State Medical Association, That the Medical Licensing Board of this State be requested to use means afforded them by statute and by regulation in an effort to utilize the services of these physicians in any area of the state where a need exists, and

BE IT FURTHER RESOLVED, That our Delegates to the American Medical Association be instructed to bring this situation to the attention of the House of Delegates of the AMA at the 1961 Clinical Session in Denver, Colorado, and to further support any constructive effort made by that body in the solution of this problem. Nothing in this resolution shall be construed as an effort or desire on the part of the West Virginia State Medical Association to alter or to change in any manner the Medical Practice Act or the regulations of the Medical Licensing Board of West Virginia concerning the licensure of foreign medical graduates.

Courtesy Resolutions Adopted

Dr. James S. Klumpp of Huntington requested and obtained the unanimous consent of the House for the

introduction of three courtesy resolutions. The resolutions which follow were adopted unanimously.

Resolution No. 4. Appreciation for Cooperation of Management and Personnel at The Greenbrier.

WHEREAS, The members of the West Virginia State Medical Association have once more enjoyed the friendly atmosphere, the luxurious surroundings and the courteous service afforded by our hosts,

THEREFORE BE IT RESOLVED, That our Executive Secretary is directed to transmit a formal note of thanks to the management and entire staff of the Greenbrier Hotel for the manner in which the members, families, and guests of the Association have been treated during our 1961 Annual Meeting.

Resolution No. 5. Coverage of Convention by News Media.

WHEREAS, The proceedings and events of the 1961 Annual Meeting of the West Virginia State Medical Association have been so ably and fairly reported to the public in all areas of communication,

THEREFORE BE IT RESOLVED, That our Executive Secretary is directed to transmit our sincere thanks to the agencies of press, television and radio concerned, with especial regard to the United Press International, The Associated Press, The Charleston Gazette and The Charleston Daily Mail.

Resolution No. 6. Distribution of Daily Newspaper by the Hospital and Physicians Supply Company of Charleston.

WHEREAS, For several years past, and during the current Annual Meeting each of our members and guests have enjoyed the delivery of a copy of a daily newspaper at their doors, thus brightening the start of each day,

THEREFORE, BE IT RESOLVED, That our Executive Secretary is directed to transmit a formal note of thanks to the Hospital and Physicians Supply Company of Charleston, West Virginia, for their continued courtesy.

SAVE FOR YOUR INDEPENDENCE ★ BUY U.S. SAVINGS BONDS ★

Obituaries

CLAVIUS CLYDE COFFINDAFFER, M. D.

Dr. Clavius Clyde Coffindaffer, 75, of Clarksburg, died on September 9 at his home in nearby West Milford following a long illness.

Doctor Coffindaffer, who was a native of Benson, Lewis County, was born on May 13, 1886, son of the late Abraham and Josephine Carder Coffindaffer. He was graduated from Salem College and received his M. D. degree from the Medical College of Virginia in 1917. He interned at Memorial Hospital in Richmond, Virginia, 1916-17, and served a residency at Bellevue Hospital in New York City, 1917-20. He served with the Medical Corps of the United States Army during World War I.

He was a member of the Harrison County Medical Society, West Virginia State Medical Association, Southern Medical Association, and American Medical Association.

Besides his widow, he is survived by a daughter, Mrs. David Price of Arlington, Virginia; a son, C. Clyde Coffindaffer, Jr., of Canooga Park, California; two brothers, Dr. Russell S. Coffindaffer of Shinnston and Wayne Coffindaffer of Clarksburg; and two sisters, Mrs. Hayward Currey of Kincheloe, and Mrs. L. T. Williams of Bristol.

BENJAMIN FRANKLIN MOYERS, M. D.

Dr. Benjamin Franklin Moyers, 90, of Bridgewater, Virginia, died on August 9 at his home in that city following a long illness.

Doctor Moyers, who practiced medicine in Mathias, West Virginia for more than 50 years until he retired in 1951, was born at Bergton, Virginia, on September 4, 1870, son of Mr. and Mrs. Samuel Moyers.

He received his M. D. degree from the College of Physicians and Surgeons in Baltimore in 1897.

He was an honorary life member of the Potomac Valley Medical Society, West Virginia State Medical Association and American Medical Association.

Besides his widow, he is survived by two daughters, Mrs. Leonard Hollen and Mrs. C. T. Riddle, Jr. both of Bridgewater, Virginia; a son, Dr. W. B. Moyers of College Park, Maryland; a sister, Mrs. A. B. May of Bergton, Virginia; two brothers, A. S. Moyers and S. Loy Moyers, both of Bergton, Virginia; and four grandchildren.

* * * *

GEORGE LEWIS PENCE, M. D.

Dr. George Lewis Pence, 80, of Hinton, died in a hospital in that city on August 18 following a long illness.

Doctor Pence, who practiced in Hinton for more than 40 years prior to his retirement in 1960, was born at Pence Springs on February 24, 1881, son of the late Andrew and Sally Ann Lewis Pence.

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Doctor Pence received his M. D. degree from the College of Physicians and Surgeons in Baltimore in 1906. He served as a Captain in the Medical Corps of the United States Army during World War I and located in Hinton following the war.

During World War II he served as draft board examiner and federal medical examiner for the Civil Service Commission. He was an honorary life member of the Summers County Medical Society, West Virginia State Medical Association and the American Medical Association.

Besides his widow, he is survived by a niece and a nephew.

* * * *

FRANK FREEMAN SOWERS, M. D.

Dr. Frank Freeman Sowers, 60, of Fairmont, died on August 13 at his home in that city. Death was attributed to a heart attack.

Doctor Sowers, who practiced his specialty of dermatology in Fairmont for more than 25 years, was born in Landgraff, McDowell County, on April 1, 1901, son of the late John D. and Bess Louise Litchford Sowers.

He attended the two-year School of Medicine at West Virginia University and received his M. D. degree from the Medical College of Virginia in 1927. He interned at the Skin and Cancer Hospital in New York City, 1927-28.

In 1930, Doctor Sowers was appointed health officer for the Marion County Health Department and served

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in that capacity for several years before leaving to take postgraduate work in dermatology in New York City.

He was one of the outstanding pistol marksmen in the country, and won the national pistol championship in 1941.

He was a member of the Marion County Medical Society, West Virginia State Medical Association and American Medical Association.

Besides his widow, he is survived by a daughter, Mrs. Robert Jones of Bristol, Tennessee; a son, John Daniel Sowers of Fairmont; five sisters, three brothers, and six grandchildren.

* * * *

HUGH GRAVES THOMPSON, M. D.

Dr. Hugh Graves Thompson, 64, of Charleston, died on August 30 at his home in that city following a long illness.

Doctor Thompson, who practiced in Charleston for almost 30 years prior to his retirement in 1951, was graduated from Hampton-Sidney College and received his M. D. degree from the University of Pennsylvania School of Medicine in 1920. He served an internship at the University of Pennsylvania Hospital and also had residency training there and at Lankenau Hospital in Philadelphia.

He was an honorary life member of the Kanawha Medical Society, West Virginia State Medical Association and the American Medical Association.

Besides his widow, he is survived by a daughter, Mrs. Terry Young of Charlotte, North Carolina; a son, Hugh G. Thompson, Jr., of Charleston; three brothers, A. Garnet Thompson of Charleston, Dr. Ernest Thompson of Richmond, Virginia, and Dr. Graves H. Thompson of Hampton-Sidney, Virginia; and three grandchildren.

ACCP Meeting in New York City

The American College of Chest Physicians will sponsor a postgraduate course on "Recent Advances in the Diagnosis and Treatment of Diseases of the Heart and Lungs" at the Park Sheraton Hotel in New York City, November 13-17.

Further information concerning the course may be obtained by writing the American College of Chest Physicians, 112 E. Chestnut Street, Chicago 11, Illinois.

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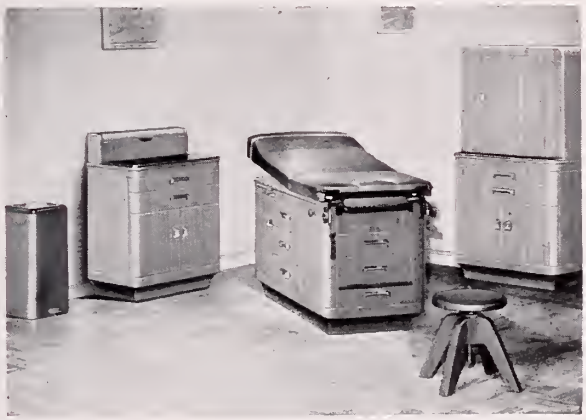

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County Societies

MASON

The regular bi-monthly meeting of the Mason County Medical Society was held at the Gene Ball Restaurant in Point Pleasant on September 11.

The program consisted of the showing of an Upjohn Company film, "Acute Abdominal Problems, Grand Rounds."—Dan Glassman, M. D., Secretary.

* * * *

McDOWELL

The regular monthly meeting of the McDowell County Medical Society was held at the Stevens Clinic Hospital in Welch on September 13. Dr. Louis A. Vega, the president, presided at the meeting which was attended by 18 members and five guests.

The program was devoted to a discussion of the Social Security program by two local representatives, Messrs. Hatfield and Myers. A question and answer period followed.—George L. Fischer, M. D., Secretary.

* * * *

PARKERSBURG ACADEMY

Frank Chappell of Chicago was the guest speaker at the regular monthly meeting of the Parkersburg Academy of Medicine which was held at the American Legion Home in that city on September 7.

Mr. Chappell, who is director of Science News of the American Medical Association, emphasized the role of the physician in civic enterprises and complimented the Academy in noting that members are active in many civic organizations.

He also stressed the need for recruitment of students, for furthering their careers in medicine and pointed out the importance of the role of the physician in health matters and in making health news available to the general public.

A guest at the meeting was Dr. D. E. Greeneltch of Wheeling, president of the West Virginia State Medical Association.

Dr. William E. Gilmore, the president, presided at the business session.—Robert C. Lincicome, M. D., Secretary.

* * * *

WYOMING

The regular quarterly meeting of the Wyoming County Medical Society was held at the Wyoming Hotel in Mullens on September 11. The Woman's Auxiliary also met at the same time.

Dr. R. C. Hatfield of Oceana presided at the meeting and Dr. Mario Cardenas presented a report of the Annual Meeting of the West Virginia State Medical Association held at The Greenbrier in White Sulphur Springs in August.

The secretary was instructed to write a letter to Dr. Ward Wylie of Mullens, the president of the society, who is a patient at the Wyoming General Hospital in that city.—Mario Cardenas, M. D., Secretary.

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The West Virginia Medical Journal

November, 1961 Vol. 57, No. 11

What's Not in the News*

Leonard W. Larson, M. D.

It is always a delight to return to The Greenbrier. It is a particular pleasure to be here at the invitation of the West Virginia State Medical Association. Your hospitality is famous, and both Mrs. Larson and I are enjoying it immensely.

In past years, I'm sure that some of your spirit of graciousness came from your late Executive Secretary, Charles Lively. May I congratulate you on your new Executive Secretary, William H. Lively, who obviously has learned the secret from his father.

Thank you, members and guests of the House of Delegates for the invitation to attend this 94th Annual Meeting.

If you have been noticing newspaper headlines and news broadcasts in the past few months, you may be getting an impression that your American Medical Association is a political organization, headquartered in Washington, D. C., whose only purpose is to sandbag governmental proposals for expanding the health and welfare of the American people.

A Medical Organization

Let me reassure you that your American Medical Association is a *medical* organization, still headquartered in Chicago, whose purpose is still the advancement of the art and science of medicine, and the betterment of health care for all people. It is this dedication which has taken us into the halls of Congress and news columns of the press.

I am sure you know what has been going on in Washington, regarding drugs and health care for the aged. Today I would like to tell you what's going on at home in Chicago—with less sound and fury, but of great importance to Americans and the medical profession.

The Author

- **Leonard W. Larson, M. D., Bismarck, North Dakota, President, American Medical Association.**

For the past 114 years, the American Medical Association has been vitally concerned with leadership for increasing better medical care. While we have accomplished much, the main lesson we have learned is that we cannot sit still, especially not today when medical progress is presenting new challenges from all sides.

The list of ways in which we have sought to promote, and are seeking to promote, the nation's health is almost infinite. I do not say this in a boastful manner, but simply as a fact.

Each of you undoubtedly know about many of our services and efforts in behalf of the betterment of the public health. Recent publicized examples have been our seat-belt campaign, sports injuries, plastic bags, accidental poisonings, alcoholism, medical student recruitment, physician placement, infant mortality and morbidity research, mental health, food faddism, diets and overweight, jobs hazards and disease, and disaster medical care.

In these and scores of other areas we strive to bring about better health in America. We shall always take the lead when we believe it is required, and we shall always cooperate when we believe we can serve.

*Presented before the second session of the House of Delegates during the 94th Annual Meeting of the West Virginia State Medical Association at The Greenbrier in White Sulphur Springs, August 26, 1961.

War on Medical Quackery

For example, our war on medical quackery is a constant struggle, and on October 6-7, in Washington, we are co-sponsoring a National Congress on Medical Quackery. Such groups as the Food and Drug Administration, the Better Business Bureau, and the Chamber of Commerce will meet with AMA representatives to discuss all forms of medical quackery—mechanical, nutritional, and the like.

Our Department of Investigation has one of the largest collections of nostrums and quack gadgets and machines in the nation. It also maintains the largest up-to-date file on medical quackery.

This National Congress on Medical Quackery is part of our overall campaign started last year to help the American public spend its health dollars more wisely. We believe that millions of dollars each year are wasted on useless quack remedies and unnecessary self-medication.

Mental Health

Your AMA also will sponsor a Conference on Mental Health in Chicago, September 29-October 1, as part of its continuing mental health program. As you may know, our Association was one of the participating agencies in the Joint Commission on Mental Illness and Health which reported in March after a five-year study of mental illness.

The AMA also is planning the first National Congress on Mental Health in which authorities and interested personnel from every aspect of American life will join in a vigorous effort to combat mental illness—one of the nation's most urgent health problems. Great emphasis will be placed on the importance of the individual physician's role as family confidant to detect early signs of mental illness, and wherever possible, to provide treatment at the initial stages.

This once again points up the importance of maintaining the personal approach with patients —of doing everything we can to prove false the charge that modern doctors "don't care."

Yes, this October will be a busy month. Also scheduled is the Second National Congress on Prepaid Health Insurance to be held in Chicago. Physicians, insurance and Blue Shield executives, industry and labor representatives, and others interested in prepaid health insurance will meet to discuss problems and explore possible solutions. Two subjects which will undoubtedly come up are (1) *use, not abuse*, of insurance, and (2) *utilization of hospitals*, as they involve both patients and physicians, and the continuing success of voluntary prepaid health insurance.

Meanwhile, our perinatal mortality and morbidity study is moving along rapidly. In this long-term research study we are seeking to learn the cause of death and defects immediately before, during, and after birth. While medical science has effectively reduced maternal mortality, there is still much to be done in the infant mortality and morbidity area.

Since this study began, we have received overwhelming acceptance and cooperation from hospitals and their staffs throughout the nation. Right now, the study is in pilot form, but we hope to expand it into a broad program and to get significant results.

There are times when launching AMA projects remind me of the woman who was extremely nervous when launching her first ship. Turning to the shipyard manager beside her, she asked, "How hard do I have to hit it to knock it into the water?"

Quite honestly, many of our activities and programs depend heavily on the support and cooperation—the extra push—of the profession. Without strong acceptance by state and county medical societies, the AMA cannot function at its best in serving the American physician and the public, and in furthering the development of the art and science of medicine.

Principles of Medical Ethics

Ethical conduct is one of those continuing subjects that requires close attention from all of us at almost all times. Our guides of conduct in our Principles of Medical Ethics have been evolved through the years by action of our House of Delegates.

As you know, at our recent annual meeting in New York City, I gave strong support to a report on medical discipline which was adopted by our House of Delegates. I definitely plan to lend all my strength and efforts to implementing greater and more effective medical disciplinary activities within the profession.

It would be tragic, indeed, if a small minority in our profession were allowed to pollute the oceans of superb medical care performed by the vast majority. Perhaps perfection in ethical conduct is not attainable, but I pledge to the public and to you that we shall attempt to get as close to it as possible.

Student Honors Program

A further example of the mounting number of significant projects is the AMA's student honors and loan program. The program is designed to focus attention on careers in medicine, to attract a substantial group of able students to prepare

for admission to medical school, and (with a built-in scholarship plan) to assist financially a number of outstanding students who for financial reasons are unable to pursue a career in medicine.

I know that scholarship awards are not new to you since you are presenting your fourth scholarship award during this meeting. I congratulate Mr. Edman on earning the award, and compliment the West Virginia State Medical Association for making such an award possible.

Today our medical schools and their graduates are the models for the world. We can all be proud of our contributions, but we should also be aware of our continuing responsibilities in medical education. These include the goals of more medical schools and more medical graduates to meet the increasing population and the growing medical demands of the public.

In the last decade, physicians have contributed more than 20 million dollars to medical schools either through the American Medical Education Foundation or directly to their alma maters.

In the very important realm of medical education, one of our major activities this year is implementing the program to insure that graduates of foreign medical schools who serve as interns and residents in American hospitals are properly qualified and trained.

Some of the other developments in medical education include a study of the possibilities of increasing the stipend of residents, taking into consideration their age, education, and professional status—the formation of new committees to look at objectives of internship and residency programs, their content and quality, and how they can best be evaluated for accreditation—a study of the whole area of postgraduate medical education, and the stimulation of better continuing education—and a program of participation in more meaningful liaison with the sciences and allied health services.

Medical Aspects of Human Travel

One of our most exciting and challenging projects is intensified study and research into the medical aspects of human travel. It is obvious that medical science has played a most important role in putting a man into space and keeping him alive. Strong medical leadership is essential in speeding the fulfillment of the space age.

But we are at work on the ground, too. The Committee on the Medical Aspects of Automobile Injuries and Deaths will continue to stress a program of maximum safety for drivers, passengers, and pedestrians.

Our concern for the increasing slaughter on America's highways has led us to fight for better testing of drivers, as well as better design of automobiles. We believe that while driver negligence is the cause of many serious or fatal accidents, much of the bloodshed would be eliminated by including safety devices as standard equipment—not extras—on all automobiles. Seat belts, padded dashboards, pop-out windshields—less interior junk—all these are essential to cutting down traffic carnage.

Various AMA Programs

During 1961 our Council on National Security has been placing increased emphasis on military medical affairs. The AMA House of Delegates has recognized the need for medical leadership at the highest echelons of military affairs. We also are encouraging the training of medical corps officers for the broadest services on medical staffs. This means that the doctor who joins, or is drafted into, the armed forces should be thoroughly acquainted with all aspects of military life, so that he may be that more effective.

Our Division of Environmental Medicine has embarked on a great number of significant projects, many of which bear an immediate importance to the health of our nation. This Division's activities encompass virtually everyone, including the public-at-large, athletes, missionaries and diplomats, members of the Armed forces, urban workers, and farmers.

One of our rural health programs of particular significance for rural physicians is a study of the medical and public health aspects of migratory laborers.

Our Environmental Medicine Division is placing increased emphasis on community health, providing for the individual those health benefits which he cannot acquire for himself.

Our Department of Health Education is expanding and strengthening its pamphlet programs. The first of this year inaugurated a new monthly publication, "Health Service for Schools and Colleges." This is designed to provide teachers and school health authorities with current health news in concise form.

A new department of International Health has been staffed and is rapidly progressing in its duties of coordinating all AMA programs concerned with international health. We feel that our association is in the best position to assume leadership in this essential area.

Our department is working closely with such organizations as the World Medical Association, the World Health Organization and the Inter-

national Cooperation Administration, part of the State Department, to help bring 20th century health to every human being, whether he lives on the banks of the Amazon, the Nile, or in the Congo.

An important project underway will assist medical missionaries in carrying out their medical responsibilities around the world.

I could go on for hours telling you details of the many new and continuing projects of the American Medical Association—the activities which too seldom get headlines because they do not produce dramatic, flash results. Instead, they depend for their results on time, and effort, and the many small turning points which mark progress in medicine.

I think, however, that I have given you enough of a hint of what is going on in Chicago to arouse your interest. I hope I have done more. I hope I have aroused your cooperation in the activities of a wide, and ever widening, horizon of the medical profession.

The Enemy Within

During the Spanish Civil War, a city fell to the enemy in a surprisingly short period of time. In explaining this victory the commanding general stated that he had four columns without the gates of the city and a fifth column within, with major credit going to the latter.

Today, medicine is engaged in the most serious and critical fight in its long history, for at stake is nothing less than the survival of medicine within the framework of the free enterprise system. Enactment of the King Bill (HR 4222) into law will mark the beginning of the end of our present system of medical practice; and in time every man, woman and child will be included under a system of compulsory federal medicine.

One would think that this threat not only to medicine but to freedom itself would evoke an overwhelming response from physicians throughout the country. What clearer call to arms could we possibly have? What greater threat must prevail us to overcome this deadly apathy so widespread among us? For the truth is that most physicians demonstrate a degree of unconcern and disinterest which is frightening. Business as usual and too busy to be bothered are the prevailing attitudes today.

Apathy is our enemy within, and a more deadly enemy scarcely exists. It is one thing to be disinterested in the ordinary day-to-day problems that make up organized medicine. It is quite another to remain apathetic in the face of legislation which, if passed, may destroy free enterprise medical practice. Is it possible that this apathy, so widespread and harmful, exists because of fallacious concepts in regard to liberty and freedom? Do most of us believe that our part in the never-ending struggle to preserve liberty, justice, self-determination and freedom can be delegated to others? If so, we delude ourselves. While our county and state societies and the American Medical Association can accomplish much in this struggle, in the last analysis, it is the efforts of the individual that count the most.

The issues are clear. We as an organization and as individuals have a magnificent opportunity to speak for freedom. We feel sure that to do this through apathy may well mean defeat. Let each of us act now and assure victory.—Robert C. Long, M. D., in the Journal of the Kentucky State Medical Association.

The Diagnostic Approach in Radiology*

C. H. Lee, M. D.

THE time has come when the radiologist, in reporting a case, should feel ashamed to admit that the diagnosis was originally missed, and that in retrospect characteristic signs were recognized. With the present knowledge of radiology, he should be able to make the correct diagnosis in most cases and, in a reasonable per cent, the correct histological diagnosis. Failure to do so oftentimes is not from lack of knowledge but from lack of care and organized thinking. Disease, like crime, always leaves clues by means of which its identity can be established.

The following illustrative cases are presented specifically to demonstrate the proper approach in diagnostic radiology and not as case reports in themselves.

Case 1.—A 62-year-old white female was admitted to the hospital with intermittent cramping, right upper quadrant pain and flatulence of eight months' duration. There was fullness in the abdomen but no nausea, vomiting nor diarrhea. The pain was intensified after fatty food intake. There was no history of previous gastrointestinal disease.

Physical examination revealed slight tenderness in the right upper quadrant but no palpable mass. Otherwise, the physical examination was entirely negative, as were routine laboratory studies.

A barium meal examination revealed a rather extensive defect on the greater curvature aspect of the antrum (Figures 1, 2 and 3).

The defect's upper surfaces appeared fairly smooth with minimal irregularity near the center, suggesting that most of the growth was submucosal. On fluoroscopic examination sluggish peristaltic waves could be seen to pass through the area of irregular defect. There was free passage of the barium through the pylorus. No obstruction was noted.

The preoperative diagnosis of lymphosarcoma of the stomach was based on the following factors:

1. Absence of history of previous gastrointestinal disease or of peptic ulcer. If the large defect were due to peptic ulcer, there would have been much more marked gastrointestinal symptoms, with gastric retention and vomiting.

The Author

• **C. H. Lee, M. D., Radiologist, The Laird Memorial Hospital, Montgomey, W. Va.**

***Presented before a staff conference at The Laird Memorial Hospital in Montgomery, W. Va.**

Submitted to the Publication Committee, April 11, 1961.

Figure 1

Figure 2

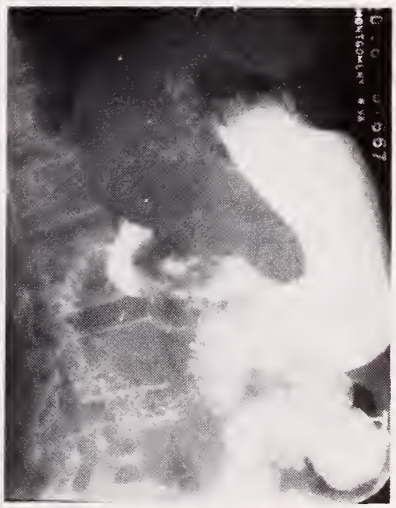


Figure 3

Lymphosarcoma of Stomach

Figure 4

Figure 5

Figure 6

Adenocarcinoma of Jejunum

2. Carcinoma of the stomach at this stage very likely would have produced obstruction. There doubtless would have been fairly severe gastrointestinal symptoms with immoderate weight loss and other distinctive signs.

3. The submucosal location of the lesion with minimal central ulceration.

4. Nodular, "fingerprint" appearance of the defect.

5. Sluggish peristalsis through the area of defect.

6. Pliability of antral lesions under fluoroscopic observation, and absence of pyloric obstruction.

The patient subsequently was operated upon and the diagnosis confirmed histologically. Following postoperative radiation therapy she has been symptom free, with no apparent recurrence after five years.

Case 2.—A 63-year-old white female was admitted to the hospital with a history of dull, aching pain in the midabdomen with associated vomiting, nausea, low back pain, fullness in the abdomen, flatulence and anorexia for three weeks prior to admission. There had been a five-pound weight loss in this period. There was no history of previous gastrointestinal disease.

On physical examination there was slight tenderness in the left lower abdominal quadrant but no palpable mass. Routine laboratory studies revealed RBC 3,700,000, WBC 7,400, hemoglobin 11 Gm. All other studies were negative.

Figure 7

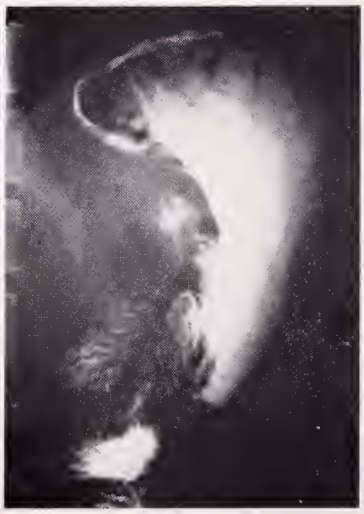


Figure 8

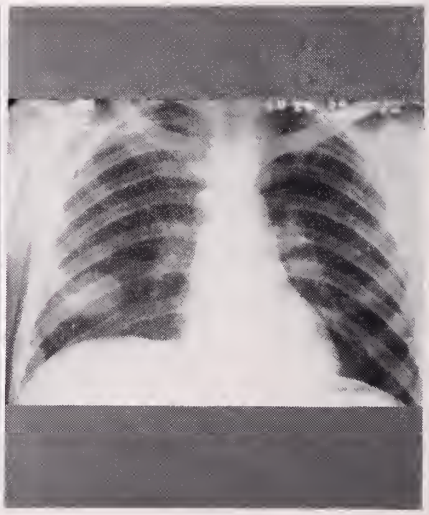


Figure 9

Malignant Teratoma of Testis

Barium meal examination revealed irregular narrowing of the distal jejunum with moderate distention of the entire jejunum proximal to the defect (Figures 4, 5 and 6).

On fluoroscopic examination the area of irregular defect apparently was rigid and fixed in position. The defect was producing partial obstruction, as revealed by x-ray taken three hours after a barium meal. The diagnosis, adenocarcinoma of the jejunum, was based on the following considerations:

1. An irregular, constant, rigid defect, with partial obstruction and proximal dilatation, suggesting the napkin ring lesion usually produced by adenocarcinoma.

2. The greater frequency, statistically, of the distal jejunum as the site of adenocarcinoma.

At operation there was a constricting lesion of the distal jejunum which proved to be adenocarcinoma. The lymph nodes in adjacent mesentery were invaded by tumor cells.

Case 3.—The patient, an 18-year-old white male, complained of intermittent fever, dull abdominal cramps and weakness of three weeks' duration. There was marked epigastric fullness but no vomiting, nausea, diarrhea nor melena.

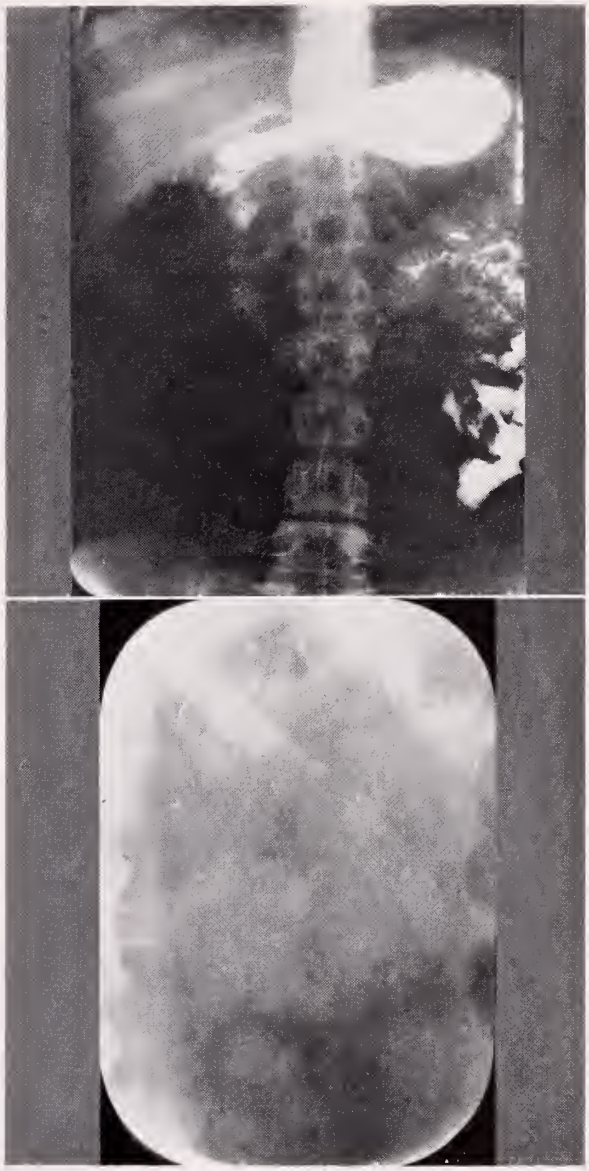
Physical examination revealed moderate tenderness and a rather large, hard, ill defined mass in the epigastrium. Laboratory: RBC 4,000,000, WBC 10,500, hemoglobin 12 Gm. The history, physical examination and laboratory studies otherwise were not remarkable.

Barium meal examination revealed a large, retroperitoneal tumor displacing the stomach and duodenum anteriorly and to the left (Figures 7, 8 and 9).

On fluoroscopy, what apparently were metastatic lesions were seen in the right lower lung field. An intravenous urogram revealed lateral displacement of both ureters but normal kidneys.

A malignant tumor of the testicle was immediately suspected. In view of the patient's young age, a tentative diagnosis of malignant teratoma of the testicle was made. The patient was thoroughly re-examined with special reference to the testicles. The right testicle was slightly enlarged, tender and hard, a finding overlooked by the intern at the time of the initial examination, such oversight being a common mistake frequently made even by experienced physicians and surgeons.

At operation, the tentative diagnosis of malignant teratoma of the (right) testicle was confirmed.



Figures 10, 11
Mesenteric Cyst

The preoperative diagnosis was based on the following considerations:

1. An extensive metastatic tumor with retroperitoneal lymphatic involvement and hematogenous spread to the right lung.

2. Reticulo-endotheliosis with extensive retroperitoneal involvement usually does not produce pulmonary metastasis in the shape of round nodules or masses. Extensive hilar lymph node involvement will be common.

3. Tumor in young patients frequently is of urogenital origin.

4. Absence of renal lesions raises strong suspicion of tumor arising from the genital organs.

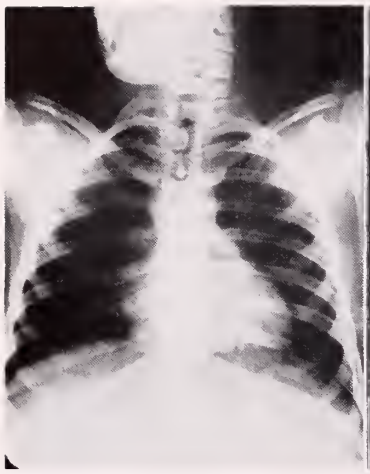


Figure 12

Figure 13

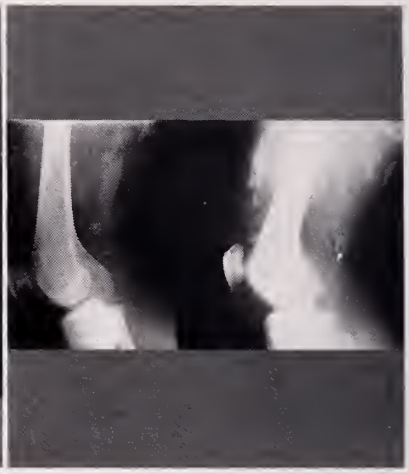


Figure 14

Dermatomyositis

5. Tumor of the testicle frequently is overlooked on physical examination.

6. Teratoma of the testicle is most common at this age (18 years).

Case 4.—A 43-year-old white female complained of nervousness and of pain in both legs of six weeks' duration. The past history was essentially noncontributory except for treatment for syphilis about twenty years previously.

Physical examination and routine laboratory studies were entirely negative. During the course of investigation an x-ray examination of the abdomen revealed a 3.0 cm. soft tissue mass with a calcified margin in the left upper quadrant. The mass was not tender and could be palpated only with difficulty. An intravenous pyelogram was normal, thus ruling out any lesion arising from the left kidney.

The mass was fairly freely movable, thereby rendering rather unlikely the possibility of a vascular lesion such as aneurysm. A barium meal examination revealed the mass to be situated close to the proximal jejunum but entirely out-

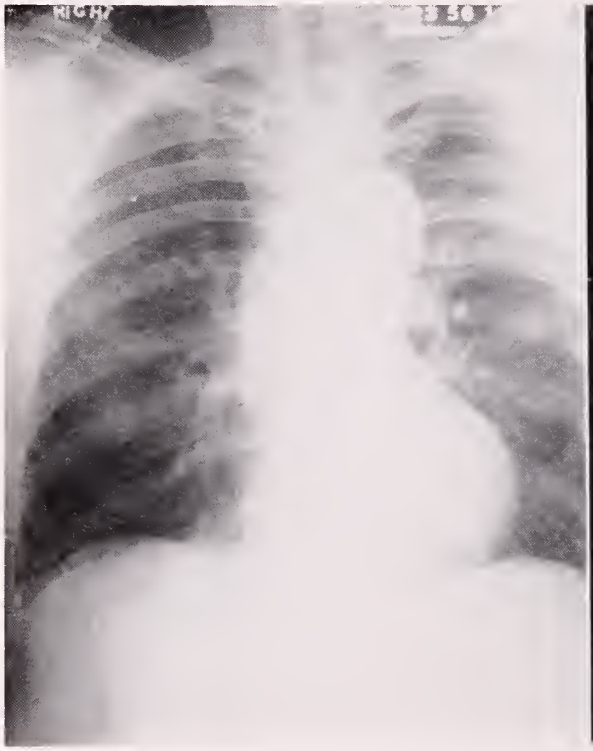


Figure 15

Figure 16

Syphilitic Aortitis

side the intestinal lumen. Based on these factors a preoperative diagnosis of mesenteric cyst was made which was confirmed at operation (Figures 10 and 11).

Almost identical cases were reported by Hinkle,[1] in 1942.

Case 5.—An 18-year-old white male was admitted to the hospital after an automobile accident. Radiologic examinations revealed numerous calcific densities in the subcutaneous tissue as well as in muscles in all the extremities and along the chest wall (Figures 12, 13 and 14).

No fractures were found. A diagnosis of calcinosis universalis was made.

The history revealed that this patient began having intermittent edema of both eyes at the age of ten. At fifteen easy fatigability, stiffness of both extremities and a dusky pigmentation of the skin developed, the last named made worse by exposure to the sun. His features gradually changed. Subcutaneous nodules developed. These at first were movable but gradually became fixed. There was also intermittent fever, prostration, muscular weakness and pain.

A biopsy revealed dermatomyositis.

Case 6.—A 64-year-old white male was seen in the Clinic because of shortness of breath in a reclining position, wheezing, cough and a feeling of choking. The symptoms had been present for two months. A routine chest examination revealed left ventricular enlargement and extensive calcification of the aorta (Figures 15 and 16).

Calcification of the ascending aorta is rather significant as it occurs in syphilitic aortitis much more frequently than in arteriosclerotic cardiovascular disease. A lateral view of the chest revealed irregular, wavy calcification of the descending aorta, the lumen of which was rather uneven. Such appearance should enable the radiologist to make the diagnosis of syphilitic aortitis before a serology test is obtained. In this case a preliminary diagnosis of syphilitic aortitis was subsequently confirmed.

Case 7.—A 20-year-old white female noticed, over a four-year period, the gradual development of a hard mass in the left occipital region. For the two weeks just prior to admission she had had headache on the left. Physical examination revealed a 2.0 cm. mass in the left occipital region; the mass was hard, flat, round and slightly tender. The overlaping skin was freely movable.

Roentgenologic examination revealed a radiolucent defect surrounded by sclerotic margins in the left occipital region between the inner and outer tables of the skull (Figures 17 and 18).

A diagnosis of intradiploic epidermoid was made, which was confirmed at operation.

Case 8.—A 7-month-old white male was seen because of an enlarging right upper abdominal mass which had gradually developed since birth. Physical examination revealed a large, soft mass occupying the upper half of the right abdomen.

Figure 17

Figure 18

Intradiploic Epidermoid

Other findings and laboratory studies were non-contributory.

A natural reaction in such cases would be to suspect Wilms's tumor or a neuroblastoma. These possibilities were ruled out when an intravenous pyelogram turned out to be normal. A barium meal examination revealed the stomach to be displaced moderately to the left and posteriorly (Figures 19 and 20).

It became obvious that the mass was within the liver. A diagnosis of tumor or cyst of the liver was made. A liver biopsy was negative. Exploration of the abdomen revealed a large multilocular cyst of the liver.

Case 9.—A 36-year-old white female was first seen because of epigastric distress associated with an idiosyncrasy to fried and fatty food, of a few months' duration. There was no history of biliary colic, nausea or vomiting, nor of typical symptoms of peptic ulcer. Physical examination and laboratory studies were negative.

An oral cholecystogram revealed a well functioning gallbladder with a 3.0 mm radiolucent defect in its mid-medial border (Figure 21).

The defect appeared to be intimately related to the mucosa and remained in the same relative position when x-rays were made with the patient in various positions. The radiolucent defect was constant and never moved.

A preoperative diagnosis of papilloma of the gallbladder was made. Cholecystectomy was performed and the gallbladder was found to have changes due to chronic cholecystitis and a 3.0 mm. papilloma. There were no calculi.

The diagnosis of papilloma of the gallbladder was made five times within a period of less than five years at Laird Memorial Hospital. In one case the patient refused surgery. In two cases the patient was found to have papilloma after surgery. One case proved to be a cholesterol calculus embedded in the mucosa of the gallbladder, while another case, the fifth, turned out to be carcinoma of the gallbladder.

The diagnosis of papilloma of the gallbladder should be based on the following observations:

1. Papillomas usually are about 5.0 mm. in average size. For the most part, they are two or three in number.

2. Papillomas are always situated close to the wall of the gallbladder and remain in the same relative position regardless of the patient's position or of contraction of the gallbladder.

3. The gallbladder usually functions well in such cases.

4. A floating calculus will change in position and never can be seen close to one of the walls of the gallbladder (Figure 22).

Figure 19

Figure 20

Cyst of Liver

Figure 21. Papilloma of Gallbladder.

Case 10.—A 50-year-old white female, a known diabetic for approximately one year, was admitted to the hospital because of intermittent, aching, right lower quadrant pain for eight weeks, which was becoming progressively worse. There were nausea, anorexia, constipation and weakness, with occasional dark blood in the stools. There was no weight loss. On physical examination there was a 13.0 cm. tender, firm, lobulated, movable mass palpable in the right lower abdominal quadrant.

Laboratory studies revealed a blood glucose level ranging from 90 to 230 mg. per hundred cc. Blood count showed RBC 3,700,000, WBC 8,300, hemoglobin 8 Gm.

A barium enema examination revealed extensive irregular defects in the cecum and adjacent ascending colon. The defects appeared to be lobulated, hard and rigid, but freely movable (Figure 23).

The extensive lesion apparently was producing partial obstruction. A preoperative diagnosis of carcinoma of the cecum and ascending colon, with perforation, was made.

The surgical specimen, however, revealed malignant carcinoid of the cecum and ascending colon, with involvement of the mesenteric lymph nodes. The appendix and terminal ileum were not involved.

The author is not aware of any distinct diagnostic signs, from a radiological standpoint, by which carcinoid of the colon can be differentiated from carcinoma.

Certain observations during the barium enema examination were felt to be of significance:

1. The lesion was hard, lobulated and easily

Figure 22. Floating Biliary Calculus.

Figure 23. Carcinoid of Colon.

palpable. Carcinoma of the right colon usually is a soft, fungating tumor hard to palpate.

2. The lesion was freely movable. Carcinoma of the right colon usually is not palpable until it has perforated and invaded the surrounding structures, in which case the tumor will be fixed rather than freely movable.

3. Carcinoma of the right colon usually produces diarrhea rather than constipation since it is not a constricting lesion. In this case there was partial obstruction with constipation.

The foregoing differential points perhaps may be of some help in the future when we learn more about the appearance, radiologically, of carcinoid of the colon.

Summary

Ten cases of various types, with emphasis on their diagnostic points radiologically, are presented in brief summary form for the specific purpose of illustrating the proper diagnostic approach in radiology. The brief summaries are not intended as case reports.

Reference

1. Hinkle, Charles L.: Mesenteric Cysts, Am. J. Roentgenol. & Rad. Therap. 48:167 (Aug.) 1942.

Shaving—Wet or Dry?

"It's them electric razors wot causes cancer of the lung." Mr. Todd emphasised the point with an extra jab of his shaving brush against the throat of the fellow in the chair. I was next, but only for a haircut, so I poked one ear around the edge of the morning paper and waited for Todd to develop today's theme: quite a change from his usual football pools.

"Yes," he went on, "Why do you think five or six men get lung cancer compared with every one woman wot does?" Some sort of reply about smoking bubbled out of the lather. Todd snorted. "Not on your life, Sir! Them womenfolk smoke just as much as us men these days, some of them a tidy sight more. No wonder the housekeeping money goes like it does. You don't tell me six times as many men smoke as women. No, it's them electric razors." He gave his old cutthroat a vicious strop, and turned back to the chap in the chair.

"Now see, Sir, it's like this. Suppose I was clipping your moustache with the scissors, and one of the sharp bits of hair jumps in your eye. You know how it prickles. Well then, when you use an electric razor there are hundreds of little sharp bits of your whiskers wot get ground up, and you sucks some of them up your nostrils and in through your mouth. You can prove that by blowing your nose and see some of them come back. Just like a perishing vacuum-cleaner is your noseyfarincks, as our doctor calls it. And all them little sharp bits of hair gets sucked down into your tubes, and stick in the lining of your lungs. Worse than sandblasting it is; proper chronic irritating, I say." Mr. Todd moved round towards the other cheek.

"But that's not all there is to it. Them whiskers, wot your electric razor grinds off sharp and dry, ain't clean whiskers. No, Sir, you've been pushing that face of yours all day through them diesel fumes out of our buses, and maybe streaming tobacco smoke across your cheeks as well. If you was to peer at them whiskers through a magnifying glass it'd look like a spider's web with the morning dew on it. Only it wouldn't be dew. It'd be dollops of that little old three four Ben's Pie whatnot; you know, the cancer stuff wot does no good to mice. So you sucks it all down into your lungs with the help of the Electricity Board. There's your reason for more and more lung cancer, with them pylons creeping all over the country."

The last strokes of the master hand were in full swing. "And, how many ladies use electric razors on their faces? There's your difference between men and women getting lung cancer." The towels were peeled off, and Mr. Todd straightened his back. "No, Sir, you stick to the old soap and water. Let me fix you up on weekdays, and I'll sell you some razor blades for Sunday. Thank you very much, Sir. Next please."—In England Now, a Running Commentary by Peripatetic Correspondents in The Lancet.

Ocular Signs in Trichinosis

(Case Report)

Robert S. Rosner, M. D.

Conjunctival injection and chemosis, lid edema and muscle pain occurring in both eyes are characteristic ocular signs of trichinosis, a systemic infestation caused by the parasite Trichinella spiralis. Sporadic cases still are seen in most areas of this country. Trichinosis is contracted by the ingestion of partially cooked meat of a diseased animal, particularly the pig.

The present case is reported to illustrate the characteristic ocular and systemic findings which lead to the diagnosis.[1, 2]

Report of a Case

The patient, a 65-year-old man, gave a history of sudden onset of red eyes and swelling of both orbital areas. He complained also that lights annoyed him. He stated that he was a diabetic. He had had mild diarrhea for a short time.

On examination, there was bilateral lid edema with deep congestion and injection of the blood vessels, and considerable chemosis and swelling of the bulbar conjunctiva. Tenderness and pain were complained of on movement of the eyeballs. Exophthalmometer readings (Hertel) were 23 mm. in the right eye and 25 mm. in the left eye. He was hospitalized, and only the positive findings are mentioned:

Fever ranged from 100 F. to 101 F. rectally. The blood counts were of interest: Eosinophiles on the first day were 11 per cent, on the third day 30 per cent and on the fifth day 38 per cent. The eosinophilic count was 635 per cubic mm.

On the fifth hospital day a biopsy of the left gastrocnemius muscle was reported as follows:

Gross Description: Received are two separate fragments of skeletal muscle, each about 1.5 cm. in greatest dimension. Sectioned and entirely embedded.

Microscopic Examination: Numerous sections of the muscle were prepared. All of them show focal areas of infiltration by lymphocytes and eosinophilic polymorphonuclear leucocytes, with focal nonspecific or nondiagnostic granulomatous areas in many areas. In one of the sections a larval form of trichina is seen surrounded by an exudate composed of lymphocytes predominantly, but also with a few eosinophiles.

Diagnosis: Trichinosis of muscle (subacute form).

The parasite was not found in the stools.

Discussion

Trichinosis is caused by a roundworm parasite (Trichinella spiralis). It is estimated that 350,000 new infestations develop in the U. S. every year. The patient becomes infested when he eats under-cooked pork containing the encysted larvae. The stomach juices digest the cyst wall and the larvae are liberated and penetrate the mucosa of the small intestine. These larvae mature sexually within 4 days and mate. Following this the male dies. The female, which is twice the size of the male (3mm long), burrows into the intestinal wall and discharges her young by the seventh day. These tiny 0.1 mm. larvae travel via the lymphatic circulation to the blood stream, thence to various tissues of the body.

Figure 1

The Author

- **Robert S. Rosner, M. D., Senior Clinical Instructor in Ophthalmology, Western Reserve University School of Medicine, Cleveland, Ohio.**

Submitted to the Publication Committee, May 18, 1961.

Only those larvae that reach striated muscle survive. They then cause myositis and the cysts eventually calcify. Elsewhere in the body the larvae are destroyed. They may live encysted for years. In animals the encysted worms constitute the source of infestation for the next host. The eye symptoms are caused by the parasite invasion of the striate muscle present in the orbital region.

Treatment

Our patient was treated with supportive agents plus large doses of ACTH. The rationale for this therapy is stimulation of the adrenal cortex. This increases the output of natural adrenocortical steroid. Tubadil (Endo) is a form of a tubocurarine chloride pentahydrate which is useful in the relief of muscle spasm.

Summary

A case of trichinosis with typical eye findings is presented. The disease was suspected because of the ocular findings and the recurrent eosinophilia. The definitive diagnosis was made on biopsy of the gastrocnemius muscle.

References

1. Textbook of Clinical Parasitology, New York, Appleton Century Co., 1952.
2. Idem., 6th ed. Philadelphia, Lea & Febiger, 1957.

Presidential Longevity

When President John F. Kennedy was sworn in on January 20, it was the first time in seventy-five years that three ex-presidents were alive for an inauguration, according to statisticians of Metropolitan Life Insurance Company. At that time, Dwight D. Eisenhower was seventy years of age, Harry S. Truman was seventy-six, and Herbert C. Hoover was eighty-six. Both Mr. Hoover and Mr. Truman have lived already for a longer time since their inauguration than would have been expected on the basis of mortality conditions prevailing at the time they took office.

Since the Civil War there have been only two other Presidents—Grover Cleveland and William H. Taft—who have outlived their expectation of life at inauguration. The 15 deceased Presidents from Lincoln to Franklin D. Roosevelt lived about eight years less, on the average, than expected. Even if the three who were assassinated while in office—Lincoln, Garfield, and McKinley—are omitted from the record, the actual years lived by the deceased Presidents of the post-Civil War era still averaged 6.6 years less than expected at their inauguration.

The earlier Presidents had a much more favorable longevity. The 15 Presidents from Washington to Buchanan lived an average of one and one-third years longer than their expectation of life at inauguration, and the first 10 outlived their expectation of life at inauguration by an average of about four and a half years. Of the first 10 Presidents, only Washington and William H. Harrison fell appreciably short of their expectation of life—Washington by 4.7 years and Harrison by 9.3 years.

John Adams was the longest-lived of our Presidents, attaining age ninety, or sixteen years in excess of his expectation of life at inauguration. At the other extreme, Garfield was the shortest-lived, dying from an assassin's bullet at the age of forty-nine, nineteen years short of his expectation of life. Polk and Harding died at fifty-three and fifty-seven, respectively, sixteen years before their time. Franklin D. Roosevelt was sixty-three when he died, eight years short of his expectation of life at the time he took office.

Theodore Roosevelt was the youngest at inauguration, forty-two years of age; Kennedy was forty-three. The oldest men to become President were William H. Harrison and James Buchanan, who were sixty-eight and sixty-five, respectively, at inauguration.

"Considering that there have been only 34 Presidents of the United States and that their longevity record has varied from one historic period to another," the Metropolitan statisticians conclude, "it is not possible to say whether or not the presidency shortens life."—Statistical Bulletin, Metropolitan Life Insurance Company.

Special Article

Proper Records a Challenge in the Space Age*

E. Lyle Gage, M. D.

To the doctor with a hospital practice, the medical record librarian has become indispensable. Medical records are as necessary to the practice of good medicine and surgery as the other important instruments of our profession, and their content, preservation and availability are essential to the best welfare of our patients.

From earliest times the best doctors made careful notes about their patients and kept them for future reference and study. Many early clinical discoveries were the results of careful clinical notes on an individual case. As one reads the chapters in Major's "Classical Descriptions of Disease," he is impressed by the meticulous accuracy with which the older writers recorded details and made observations. To do this their thinking had to be clear and to the point, and as they trained themselves in observation, in recording what they observed, and in thinking and reasoning so that the descriptions and discussions became lucid and were couched in good language, they themselves became better clinicians. This same principle holds true today so that when, by your begging, pleading, weeping, wheedling, sarcasm, or tantrums, you persuade your doctors to prepare good records and finish them off properly, you really have contributed to the training and refresher course of your hospital staff.

Lest you become conceited, however, permit me to comment that good grammar and correct spelling are important in your work as well as knowing which code numbers fit which diseases. Medical terminology, as I am sure you have discovered, is made up both of Greek and Latin derivations as well as an assortment of terms in the many languages in which descriptions of medical conditions have been written. To appreciate your work to its fullest, you should spend some time in the study of the derivation of words. Some medical writings are almost lost to the world because of their obtuse and stereotyped formality or because of the inexcusable use of big words of foreign derivation. To illustrate the point I have written a brief case history, using words from the medical and the psychiatric dictionaries, which you will find on your mimeographed sheet. Beneath it is the same case history in simple language. You will find also the words formerly used together with their definitions.

The Author

- **E. Lyle Gage, M. D., Department of Neurosurgery, Bluefield Sanitarium, Bluefield, West Virginia.**

Case Report

Mrs. X.—Chief Complaint: Diposis avens, callipedia, catagelophobia and claustrophobia.

History of Present Illness: Since birth this young lady had been subject to cheraphrosyne, dacrygelosis, misologia and hypobulia. There were times when gamomania seemed to rule her thinking and then there were episodes of misogamy, morbus scelestus, morbus eruditorum and hemothymia. During these periods, sicchasia, sitophobia and sensations of deja vu alternated with misogamy, misogyny and misopedia. At times perichareia and canchasmus were present. Because of these problems her mother had cacogeusia, cacosomnia and catabythismomania, and brought the daughter to the hospital.

Case Report

Mrs. X.—Chief Complaint: Craving for alcohol, desire to give birth to a beautiful child, fear of ridicule, and fear of close places.

History of Present Illness: Since birth this young lady had been subject to a psychic state of cheerfulness, spells of alternate weeping and laughing, hatred of conversation and diminution of will power. There were times when a morbid

*Presented before the 13th annual meeting of the West Virginia Association of Medical Librarians at the Stevens Clinic Hospital in Welch, June 2-3, 1961.

Submitted to the Publication Committee, June 19, 1961.

desire to marry seemed to rule her thinking and then there were episodes of hatred of marriage, and epileptic seizures associated with an impulse to murder. During these periods disgust for food, fear of eating food and a feeling of reliving past experiences alternated with hatred of marriage, hatred of women, and a morbid hatred of children. At times delirious rejoicing and inordinate laughter were present. Because of these problems her mother had a bad taste, sleeplessness and a morbid impulse to commit suicide by drowning, so she brought the daughter to the hospital.

To one familiar with the medical terms the first history may be entirely understandable and have full clinical meaning, but for purposes of general understanding, good reference and cross reference, it is almost useless. If the physician is to write both for his own records and the benefit of those who later may treat the patient or use the case history for research purposes, the clearest and simplest language possible should be used.

Sir William Osler, by dint of careful self-criticism and long study, came to be one of the most readable and understandable writers of all time. In 1891, he wrote "Principles and Practice of Medicine." In 1905, Frederick Gates, adviser to John D. Rockefeller, read the book and found it so understandable and fascinating that he suggested to Mr. Rockefeller the founding of the Rockefeller Institute for Medical Research. Harvey Cushing, winner of the Pulitzer Prize for his "Life of Sir William Osler," is said to have rewritten a large number of his papers as many as four times before being satisfied with them.

Word Power

Lincoln's Gettysburg Address is a prime example of the power of simple words well chosen and properly associated to express great and noble thoughts and to conjure up in the mind of the listener or reader clear and enlightening mental images. The medical history, within certain limits, can be made to do the same thing, but it must be written as the patient tells about himself and, at the same time, with considerable thought as to the meaning of the words used.

In some areas, there is a tendency among doctors to use local terms and colloquialisms in histories. The habit should be dispensed with if histories are to be of value for publication purposes. Another tendency in some schools of medicine is to use proper names in designating diseases. In some instances the use is of such long standing that, actually, the name has become a part of medical terminology and, perhaps, is acceptable.

In general, however, anatomical and pathological terms used in the Standard Nomenclature of Diseases are distinctly preferable.

The field of the medical record librarian is enlarging with a speed equal to that of medicine. New operations and new techniques are requiring new terms of description and new classification numbers. Learning the relation of the new to the old constantly poses new problems for you. With the advent of photography and finger printing for identification, another phase of record keeping has been added to those of x-ray and laboratory reports, electrocardiograms, electroencephalograms, myelograms, arteriograms and sinograms. Isotope studies and space medicine terminology are beginning to show their influence in medical writing, as are the reports from the electron microscope and suprasonic therapy. Stereotactic surgery such as chemopallidotomy and electrothalamotomy is adding terms of nomenclature which fill your charts and cross indices. You should welcome these as new challenges to your special field.

Care of the Case Record

The problem of space for filing case records has forced almost all hospitals to turn to microfilming of those up to a certain year. The technique of microfilming, the filing and, later, the reproduction of the film when requested are, rightly, duties within the sphere of your responsibility.

Another phase of medical record work that is becoming important is the maintenance of records in such shape and accessibility that any one of them can be produced on demand, for inspection by a representative of the Joint Commission on Accreditation of Hospitals, and produced with full confidence that insofar as the hospital's case records are concerned, the requirements for full accreditation have been met. Making certain that all data are available as required by third party purchasers of hospital and medical care such as the Workmen's Compensation Fund, Blue Cross-Blue Shield, Department of Health, Education and Welfare, Social Security, Medicare, Medical Aid to the Aged, Veterans Care and the various insurance companies is one of your big jobs.

Be certain also that records have complete documentation and reports of any accident that happens to a patient in the hospital. These should include the signed reports of the nurses and the doctor as well as the names of witnesses and the reports of x-rays and other examinations or tests that may have been made.

Signed permission for operation should be a part of the record that is filed and, in the case of

a death, signed permission for autopsy if one was performed, together with the report of autopsy.

Reports of surgical operations, if performed, and a proper discharge summary also are necessary parts of the case record before it is accepted and filed.

Close Liaison Needed

In general, doctors are thought to be notoriously poor business men and record keepers. Close liaison, then, between the record librarian, the doctor's secretary and the nurses may determine to a great extent not only the ease with which your own work is accomplished but the success or mediocrity of your hospital's medical staff.

Many hospitals have adopted the practice of discarding the nurses' notes before a chart is filed. In my opinion, this is a mistake. Nurses' notes, if well kept and accurate, are of utmost importance. Their discard leaves a void in the record of the patient's hospital stay. The practice also may lead to a feeling on the part of the nurse that her recorded observations and reports of the patient's condition are of minor importance. In such instances there is, on the part of the nursing staff, a natural tendency to become lax or careless not only about the recorded notes but about reports to each other at the change of duty and about verbal reports to the doctors during rounds.

Litigation is becoming more and more prevalent not only in connection with personal injury, accident cases and compensation awards but with patient care as well. Some of you undoubtedly will be called upon to appear in court in connection with some of the records in your charge. The completeness and accuracy of the record and your self-assurance, on the witness stand as a result of these, will go far in establishing a just verdict.

With the enlargement of your field of work, there is bound to be some tendency to specialization and who knows but that some of you may want to become expert in one special phase, limiting yourself to special duties.

Automation in Record Keeping

Dr. E. Vincent Askey, immediate past president of the American Medical Association, recently remarked, "Judging from the work taken over by new medical machines, instruments and complex devices, the future of automation in medicine looks bright." The same might be said also for automation in record keeping. A special care section in a certain New York hospital has a $110,000 unit which monitors a patient's pulse, respiration, heart beat and brain impulses and transmits the data to a machine where permanent records are made by stylus. Dr. Joseph E. Shenthal of Tulane University Medical School is said to have predicted that in the future a patient's entire history will be stored on a few feet of magnetic tape and that when needed it can be read off by computers.[1]

From such progress you have nothing to fear if you are willing to keep abreast of advancing knowledge. If you enjoy learning and are willing to study you still may be youthful at 90. If you prefer just to coast along and rest on your laurels, you may be left behind because the world will not wait.

In closing, may I quote again one of my favorite bits of poetic philosophy?

> You will be what you will to be.
> Let failure find its false content
> In that poor word environment,
> But spirit scorns it and is free.

Reference

1. Medical Economics, May 8, 1961.

We Are Physicians

Members of the medical profession should be called physicians rather than doctors. There are more than 46 academic degrees and ranks that entitle their holders to refer to themselves as doctors. These include Doctors of Agriculture, Canon Law, Divinity Education, Fine Arts, Philosophy, and many others. But the list also includes many degrees in fields related to medicine, such as the Doctor of Science, Chiropody, Surgical Chiropody, Veterinary Medicine, Hygiene, Osteopathy, Napropathy, and others. Hereafter refer to us as physicians because a doctor could be anyone with legitimate postgraduate training or a graduate from any diploma mill.—Illinois Medical Journal.

The President's Page

Let's Start a 'Bootstrap Operation'

During the past month I have visited the Central West Virginia Medical Society at Buckhannon, the Rural Health Conference at Jackson's Mill, and the Potomac Valley Medical Society at Moorefield. In so doing I have had the opportunity to talk to physicians practicing in these areas. In addition, I have discussed the problems of medical service with lay people who are officers and members of farm groups. Local and state health officers have contributed their evaluation of conditions in West Virginia. During this same period I have had the privilege of attending the meetings of the House of Delegates of both the Kentucky and Pennsylvania State Medical Associations which have health problems similar to our own.

I fully realize these visits do not qualify me as an expert on the subject of rural health care and the structure of today's medical practice. However, the problems which confront us in providing good medical care to our rural population were more clearly defined.

The primary problem is a shortage of physicians practicing in rural areas. A secondary problem, but equally as important, is that there is a gradual but very significant reduction of general practitioners, not only in rural areas but throughout our nation. All of us have known this fact for some time, but with the demands of our practices and personal lives, have relegated any thoughts relative to the solution of this question to the back of our minds. It is my firm belief that the possible extinction of general practitioners should not be the concern of a single segment of the profession, but should be of vital importance to every thinking physician. Preservation of medical practice, as we know it today, hinges on the availability of the well-trained general physician.

With the knowledge of the need for physicians in rural areas and in anticipation of the opening of our four-year medical school, the West Virginia State Medical Association instituted a Medical Scholarship Fund in 1958. This was financed by an increase in our state dues. This scholarship program, under the control of the Medical Education and Scholarship Committee, provided a four-year scholarship to a deserving medical student. With all classes filled four scholarships would be in force, with one graduate each year. In accepting this award the recipient agreed to practice in a rural community for a period of time equivalent to the length of his scholarship. By so doing, he would discharge his obligation.

During the 1961 meeting of the House of Delegates of the West Virginia State Medical Association it was voted unanimously to double the number of scholarships. Also, at this time the scholarship fund was named "The Charles Lively Memorial Scholarship Fund" in honor of our late Executive Secretary who gave so many years of service to our organization. This is a positive program of which we can be proud—but is it enough?

As physicians we acclaim our independent status. We also fully agree that problems referrable to medical practice are our obligation to solve. While not all of us are native sons and daughters of West Virginia, all of us as residents equally share the responsibility of doing everything in our power to further the well being of our state and all its citizens. How better could we show our genuine concern for the betterment of health care for our people, both rural and urban, than by making our Charles Lively Memorial Scholarship Fund financially and actuarially sound so that it would not be necessary for it to depend on the vagaries of year-to-year appropriations.

While contributions to our scholarship fund are not limited to physicians, it would seem to me that we should establish a permanent fund and be in a position to expand its functions, before seeking assistance from other quarters. I realize full well the many contributions physicians are requested to make to various organizations. I also have knowledge of the large amount of free work contributed to society, to say nothing of the reduced fees relative to many insurance plans and welfare programs. Our scholarship fund, however, is ours alone to build and administer as we see fit.

At the time this page is published I intend to ask the president of each component society to appoint a committee to accept voluntary contributions to our scholarship fund. This would be a "one shot" contribution to build up reserves of sufficient proportions to accelerate and possibly expand its original objectives, if so recommended by our Medical Education, Hospitals and Scholarships Committee.

In closing, I am happy to report that the Brooke County Medical Society, with only six active members, has contributed $1020.00 to the Charles Lively Memorial Scholarship Fund in the past month. Such generosity is to be highly commended. Similar action by other component societies could well enable our education and scholarship program to be developed into the best in the nation.

D. E. Greeneltch, M. D., President

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EDITORIALS

WEIGHTLESSNESS

The state of weightlessness is frequently mentioned not only in medical literature dealing with aviation and space, but also in periodicals read by laymen. Three factors are involved in the phenomenon of weight: gravity, inertial force and supporting (or external) forces. If the last is withdrawn, there is a condition of weightlessness or zero gravity.

The matter of weightlessness is one of the many fascinating physiologic problems which concern space medicine. It is difficult to produce zero gravity experimentally for any length of time, except in an orbiting space vehicle. It occurs, of course, in any free fall, of which orbiting is a special case. Weightlessness can be produced in a person who dives into the water from a springboard; in doing this his body actually describes a parabolic curve. About at the height of the curve his body is in a state of weightlessness; this period obviously lasts for just a second or so until air resistance again produces weight. Weightlessness is also produced momentarily in individuals riding in an amusement park rollercoaster; it is experienced just at the top of the arc.

The period of weightlessness can be prolonged by aircraft describing a parabola. Recently, by the use of fast planes, weightlessness has been produced from 40 to 60 seconds. By repeating the procedure individuals have been subjected to this phenomenon for a total of 10 to 12 minutes in the course of one flight.

Under normal conditions the otolith organs, the organs of sense, muscle sense, posture sense, and the eyes furnish detailed messages to the brain about the state of tension, position, and support of the body. During the state of weightlessness some muscle sense remains, but virtually all factors except the eyes become inoperative. The subject has to accustom himself to a new and strange environment.

A number of interesting physiologic and psychologic studies have been made on both man and animals during the state of zero gravity. It has been known for some time in making neuromuscular studies, such as marking an "X" in small squares or, by means of a stylus hitting a bull's eye target on the instrument panel, that the subject has a decided tendency to overshoot the mark. It is of interest that he may improve his accuracy by subsequent trials.

Other studies have been made. Subjects were asked to drink water from a glass. The results were unfortunate, for the fluid enveloped the face and flowed into the nasal passages and even entered the sinuses. It was obvious that water cannot be drunk from a glass under conditions of zero gravity.

Micturition has been studied during the weightless state. This physiologic function can

be performed readily. However, the desire for urinary urgency decreases. It has been postulated that the weight of the fluid pressing against the floor of the bladder is chiefly responsible for the sensation of bladder fullness. The observations suggest that the primary sensory zone may lie in the trigone of the bladder rather than in the stretch receptors in the walls of the bladder.

The heart rate, arterial and venous pressure, and respiration have been studied in animals during short periods of zero gravity. In man such early observations were made for periods of about 15 seconds. In the short periods studied no significant changes were observed.

What has been needed, of course, are studies made over longer periods of time. In this country two astronauts have been in a state of weightlessness for 15 minutes or so; one Russian has been in a state of zero gravity for approximately an hour, and another, as far as we know, for over 24 hours. All four astronauts apparently returned in good health and spirits. Detailed experiences and scientific observations on these flights are awaited with keen interest.

NATIONAL COUNCIL OF CHURCHES TAKEN TO TASK

We always find something worth-while in *Christian Economics*. The Editor, in a recent issue, takes the National Council of Churches to task for endorsing the principle of medical care for the aged as a part of the Social Security set up. His reasoning is so clear and his queries so incisive that we quote parts of it:

"The General Board of the National Council of Churches has unanimously endorsed medical care for the aged through the Social Security system. The Board prefers 'individual, family and group responsibility,' but when needs can be met, 'only by united socially planned action' the Board favors such action. Ignored is the fact that the American people have had better medical care than is available in any of the countries that have adopted 'socially planned action.'

"The Board points to the rapidly rising cost of health care and insurance which 'make it difficult for the average family' to afford adequate protection. If the average family cannot afford adequate protection now, which is obviously true in many instances, how will resorting to wasteful socialism make better care possible? Will bringing medical services under the aegis of the Social Security System make them any less expensive? Will not the average family have to pay for it just the same under Social Security as under the present system?

"Wasteful socialism will make medical care more, rather than less, expensive and it will furthermore make it less satisfactory . . .

"Socialism cripples industry and retards the production of wealth. That emphasizes difficulties such as the problem of medical care. Instead of removing the cause, shortsighted people aggravate the problem by proposing more socialism. The socialized medicine now being urged upon us is a good example of that fact. Others are sure to follow in rapid succession. Indeed, they are already being urged upon us. Our descent into totalitarian socialism is inevitable unless we alter our course promptly."

We welcome such expressions of opinion from this Christian organization which seems to use common sense in evaluating the economic phase of the principles established by the Savior of Mankind. More power to this magazine!

EXPERIMENTAL MEDICAL EDUCATION

Boston University is pioneering in a course of six years for a degree of doctor of medicine and bachelor of arts, both degrees to be conferred upon completion of the six year program. Forty students have been chosen for the experimental course. They ranked in the upper ten per cent of the college-going students throughout the United States based upon high school averages and College Board Examinations.

The aim of the plan is to cut two years from the current procedure requiring eight years. The first two years' work is primarily in the liberal arts. At the end of this period, the progress of each individual student will be evaluated and those considered capable will, if they so desire, be allowed to continue in the course.

We understand that Northwestern is undertaking a somewhat similar experimental program, the details of which we do not have. Such programs, if successful, will ameliorate one of the really ligitimate criticisms of modern medical education—the length of time required to acquire the M. D. degree.

Miracle Drugs . . . Household Words

Over the past 20 or 30 years medical contributions to the health and welfare of our people through careful research have been magnificant. That this is true is clearly evidenced by the fact that miracle drugs, lifesaving vaccines and new types of equipment have become household words even for the man on the street.—Charles Rhyne, former president, American Bar Association.

GENERAL NEWS

Large Attendance at 14th Annual Rural Health Conference

More than 250 persons attended the 14th Annual Rural Health Conference which was held at Jackson's Mill on October 5. The theme for the one-day meeting was "Our Responsibilities in Rural Health."

The West Virginia State Medical Association sponsors the conference annually under the auspices of its Rural Health Committee, with the full cooperation of the West Virginia Home Demonstration Council, the West Virginia Farm Bureau, the State Department of Health, the West Virginia Congress of Agriculture, and the Agricultural Extension Division of West Virginia University.

Doctor Staats Presiding Officer

The meeting was called to order at 10 A. M. by Dr. Charles E. Staats of Charleston, the presiding officer. He is immediate past chairman of the Rural Health Committee of the State Medical Association.

The invocation was given by the Rev. Henry Austin, Pastor of the First Baptist Church in Buckhannon.

Keynote Address

Dr. Kenneth E. Penrod of Morgantown, Vice President, West Virginia University Medical Center, delivered the keynote address. His subject was "How the West Virginia University Medical Center is Contributing to Better Rural Health in West Virginia."

Doctor Penrod emphasized at the outset that the West Virginia University Medical Center is "dedicated to the production of well-educated, well-trained young people in all of the many facets of the health care industries. Our job is to see to it that each of these students has the very best educational opportunity available in the United States, and that their talents will be developed to the very highest degree."

Concerning the shortage of trained physicians and other health personnel in the rural areas, Doctor Penrod stated that "the production of physicians by the West Virginia University School of Medicine, even when it is graduating full classes, is not going to solve all of the problems of providing rural medical care—at least not alone and without a lot of help from a great many sources."

He said that while the faculty at the University cannot assign a man to practice medicine in any given location in a free America, they would encourage these young men and women to locate for practice in areas where their services are needed most.

"In the long run," he said, "it will be up to all of us—the citizens of the State of West Virginia—to make life sufficiently attractive in our communities as to make these graduates wish to stay among us. And I believe, with all of us working toward this end, it could be done and we can look forward to a brighter tomorrow."

Advances in Medical Care

Doctor Penrod said that the provision of health services in this country has undergone a great change in the past fifty years. He said that with an increased realization of what medicine can offer, more and more people are demanding better care. He said that over the last thirty years the average number of visits to a physician in one year has increased by approximately two and one-half times.

Dr. Charles E. Staats of Charleston, center, presiding officer at the annual Rural Health Conference, is shown with Dr. Kenneth E. Penrod, the keynote speaker, and Miss Gertrude Humphreys of Morgantown, a member of the Advisory Committee to the Association's Rural Health Committee.

He called attention to the fact that the rapid advances made in medical care during the past few years cannot be contributed solely to the discovery of so-called "miracle drugs." He cited the tremendous progress brought about by research on a broad front—the production of new knowledge and techniques at a rate undreamed of a generation ago.

Doctor Penrod said that good health care today is "so complex as to require the patient to come to it rather than for it to come to the patient. This is the real reason physicians are more and more reluctant to make house calls."

The speaker said the days of the "little black bag" are largely behind us. "The things a physician needs

to practice medicine now and in the future just won't fit into the little black bag—or even a large black bag."

Doctor Penrod told the audience that it was impossible for a physician to practice good medicine on a solo basis, removed from contact with hospital and clinic facilities for diagnosis and treatment. He said this is the reason that emphasis is placed on acquainting the medical student with the hospital setting.

Specialization

He said that there is a definite trend toward specialization in the practice of medicine, as opposed to the development of the general practitioner.

"A medical student in his development becomes so impressed with what is known in each of the various fields of medicine to which he is exposed," he said, "that he becomes dissatisfied with knowing only a small part of the tremendous body of knowledge he could know and usually decides that he would rather know a great deal about a part of the whole field than a little about the entire field."

Doctor Penrod said that the development of community clinics is becoming increasingly prevalent in this country. He said that a clinic group, "representing pooled talent for coverage in depth at least in many areas of health care, can, in one stop, provide excellent care for the major share of the ills of a patient."

Panel Discussion

Following Doctor Penrod's keynote address, the remainder of the morning session was devoted to a panel discussion on "Individual and Group Responsibilities in Rural Health."

Dr. Clark K. Sleeth of Morgantown, Dean of the West Virginia University School of Medicine, served as moderator.

One of the participants, Miles C. Stanley of Charleston, president of the West Virginia Labor Federation, AFL-CIO, said he believed that communities seeking physicians must pool their own resources to provide well-equipped facilities in order to attract trained medical personnel.

He said he agreed that group practice on a regional basis is a necessity in rural areas. "The clinical approach to rural practice would be beneficial not only to citizens in a given area, but also to the physicians. It would allow physicians more free time to enjoy life with their families."

Mr. Paul Nay of Jane Lew, president of the West Virginia Farm Bureau, said that his organization has always been interested in better rural health and has urged local farm bureaus to cooperate fully in meeting rural health needs.

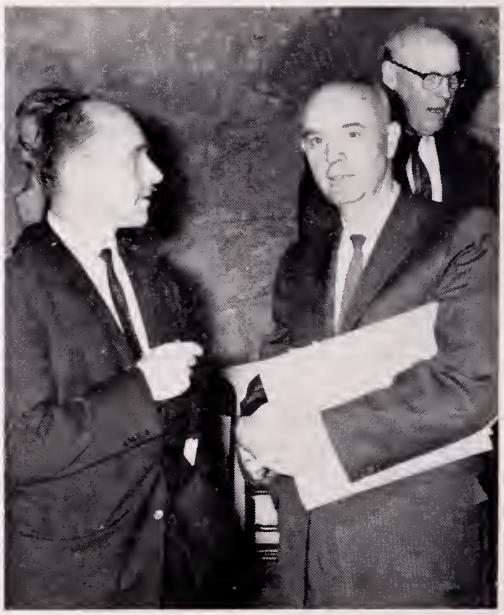
He said that it was the duty of farm bureau members throughout the state to help interest young men and women in pursuing careers in medicine and allied fields.

Mr. Nay also urged physicians practicing in rural areas to arrange their schedules so that at least one physician would be available for emergency calls at all times.

Positive Action to Preserve Health

Miss Freda Engle of Morgantown, a member of the faculty at the WVU School of Nursing, urged individuals and groups to take positive action to preserve the health of those living in rural areas. She said that those interested in promoting good health should seek advice initially from physicians, health department officials and other authorities in the field.

Jim Comstock of Richwood, Editor of the *Hillbilly*, said that local and state health departments, together



The morning session at the Rural Health Conference was devoted to a panel discussion on the subject, "Individual and Group Responsibilities in Rural Health." In the picture on the left, Dr. Clark K. Sleeth served as moderator and the members of the panel were, left to right, Miss Freda Engle of Morgantown, Paul Nay of Jane Lew, Miles C. Stanley of Charleston, Rev. Henry Austin of Buckhannon, and Jim Comstock of Richwood.

In the other picture, Dr. William S. Herold of Charleston, left, talks with a member of the panel, Jim Comstock of Richwood, Editor of the Hillbilly.

with other agencies, are understaffed because of inadequate budgets.

He said that too many of our bright young men and women have adopted the attitude, "go where it is if you can't make it where you are."

Rev. Henry C. Austin, Pastor of the First Baptist Church in Buckhannon, said that we must wage an "all-out campaign toward persuading our young people that the greatest opportunities are not out of the state, but right here in West Virginia. The hills of West Virginia have a lot more than coal in them."

Organizations in communities should be given the opportunity to help solve rural health problems," he said. "It is up to the experts in this field to let them know in advance how problems could be solved by group action."

Summing up the discussion, Doctor Sleeth said, "there is no limit to what a group of people can do if we don't care who gets the credit."

The morning session came to a close at noon, at which time those attending the meeting adjourned to the Mount Vernon Dining Hall for luncheon as guests of the State Medical Association.

Address by Dr. D. E. Greeneltch

Dr. D. E. Greeneltch of Wheeling, President of the State Medical Association, was introduced by Doctor Staats and delivered a short address of welcome at the opening of the afternoon session.

He commended the representatives of various groups in attendance at the meeting for their continued interest in solving rural health problems in West Virginia.

He pointed out that although there is a definite trend in the medical profession toward specialization, the role of the general practitioner is equally as important in providing for the health care of our population.

Doctor Geeeneltch said that the House of Delegates of the State Medical Association had approved the establishment of an additional annual scholarship to be awarded to a student enrolled in the West Virginia University School of Medicine. He pointed out that four recipients of the scholarship awards are now enrolled in the School and that when the program is in full operation eight students will be receiving assistance from the scholarship fund annually.

Afternoon Session

Following Doctor Greeneltch's address, the remainder of the afternoon program was devoted to demonstrations and discussions of the prevention and handling of farm accidents.

The participants and their subjects were as follows:

Automobile Seat Belts—Eugene J. Powell, State Health Department; Protection of Water Sources—O. R. Lyons, State Health Department; Fire Hazards—Frank N. Clark, Deputy State Fire Marshal; Home Nursing of Burns—Mrs. Cynthia Mills, R.N., Charleston; and Rabies—L. A. Dickerson, M. D., State Health Department.

Electrical Safety—L. A. Walls, Fairmont, Monongahela Power Company; Poison Control Centers—Minter Ralston, Sr., Weston, and Eugene J. Powell; Cancer—Martha Jane Coyner, M. D., Harrisville; Survival Kits—Samuel J. Hawkins, State Health Department; Film on Mouth-to-Mouth Resuscitation—Harold Colley, State Health Department; Commodity Foods—Mrs. Marian Cornell, State Health Department; Proper Ventilation of Stoves—Harvey J. Roberts, State Health Department; and Gun and Hunter Safety—Joe M. Hutchison, Jr., WVU Department of Recreation.

Doctor Staats also presented several demonstrations on prevention and handling of the more frequent accidents in and about the rural home.

Dr. D. E. Greeneltch of Wheeling, center, president of the State Medical Association, and Dr. J. C. Huffman of Buckhannon, a past president, were among the more than 250 persons who attended the one-day conference at Jackson's Mill.

Advisory Committee

The program for the conference was planned by members of the Advisory Committee to the State Medical Association's Rural Health Committee.

In addition to Doctor Staats, the other members were Miss Gertrude Humphreys of Morgantown, State Leader, Home Demonstration Work, WVU Agricultural Extension Service; Mrs. W. N. Phillips of Wallace, Secretary of the West Virginia Home Demonstration Council; Dr. N. H. Dyer, State Director of Health; and Gordon L. Leckie, formerly associated with the West Virginia Farm Bureau and now a graduate student at West Virginia University.

During the afternoon session, Doctor Staats introduced Dr. Martha Jane Coyner of Harrisville, Chairman of the Rural Health Committee, who will be in charge of arranging the program for the 1962 Conference.

Funerals Are Expensive

Nobody several years ago survived the series of illnesses that I have had. If someone tells me that the medicines I carry are expensive I must laugh, particularly when I read circulars advertising graves. I would rather pay for a medicine than a grave any day.—George E. Sokolsky.

Southern Medical Meeting In Dallas, Nov. 6-9

Several West Virginia physicians will be among the speakers at the 55th Annual Meeting of the Southern Medical Association which will be held in Dallas, Texas, November 6-9.

Scientific sessions during the four-day meeting will be held in the Dallas Memorial Auditorium, and the headquarters hotel will be the Adolphus.

Dr. Howard A. Swart of Charleston is the Southern Medical Councilor from West Virginia, and the associate councilors are Drs. Thomas H. Blake of St. Albans, Albert C. Esposito of Huntington, Harold H. Howell of Madison, W. F. Shirkey of Charleston, and Walter E. Vest of Huntington.

Doctor Vest is a past president of the Association and Doctor Esposito is currently serving as secretary of the Section on Ophthalmology and Otolaryngology.

State Physicians on Program

Three state physicians will appear as speakers before a meeting of the Section on Allergy which will be held on Tuesday morning, November 7. Dr. Joseph T. Skaggs of Charleston will present a paper on "The Treatment of Angioedema, Urticaria and Serum States with Phenergan."

Another Charleston physician, Dr. Richard J. Sexton, will present a paper on "Poison Ivy Prophylactic Investigation." Following presentation of the paper, the discussion will be opened by Dr. Sarah L. C. Stevens of Huntington.

Dr. James T. Spencer of Charleston will present a paper before a meeting of the Section on Ophthalmology and Otolaryngology on Tuesday morning, November 7. His subject will be "Control of Tonsillar and Adenoidal Bleeding by Electrocoagulation and Fluothane Anesthesia."

Southern Medical Officers

Dr. Lee F. Turlington of Birmingham, Alabama, is president of the Southern Medical Association. The president elect is Dr. A. Clayton McCarthy of Louisville, Kentucky.

Dr. Charles Max Cole is general chairman of the Committee on Arrangements. He has announced that the four major general sessions will feature (1) Symposium on Immunologic Disorders in Transplantations, (2) Symposium on Medico-Economics, (3) Symposium on Cosmetic Problems in General Practice, and (4) When Disaster Strikes.

A special luncheon honoring the President, Doctor Turlington, will be held at the Adolphus Hotel on Tuesday, November 7. The speaker will be Dr. George T. Pack of New York City.

The social highlight of the meeting will be a dinner dance which will be held at the Sheraton-Dallas Hotel on Wednesday evening, November 8.

Auxiliary Meeting

The 37th annual meeting of the Auxiliary will be held in conjunction with the meeting of the Association. The headquarters will be at the Statler-Hilton Hotel.

Mrs. J. C. Huffman of Buckhannon is the Southern Medical Councilor from West Virginia, and Mrs. Ross P. Daniel of Beckley is currently serving as historian of the Association.

Dr. Donald M. Burke Named Chairman Of W. Va. Acad. of Pediatrics

Dr. Donald M. Burke of Elkins was elected chairman of the West Virginia Chapter of the American Academy of Pediatrics during the annual meeting of that organization which was held at the Beckley Memorial Hospital on September 27. Other new officers are as follows:

Dr. Marcus E. Farrell of Clarksburg, vice chairman; and Dr. Robert C. Gow of Elkins, secretary-treasurer. Drs. Warren D. Leslie of Wheeling and William G. Klingberg of Morgantown were named members of the executive committee.

Dr. Sherl J. Winter of Beckley, the program chairman, presided at the scientific session which was devoted to metabolic diseases in infants and children. Dr. Paul C. Gaffney, associate professor of pediatrics at the University of Pittsburgh School of Medicine, was the guest speaker.

Dr. Curtis E. Beam of Beckley was the speaker at a dinner for members and their wives which was held at the Beckley-Winn Hotel.

Doctor Beam, who is chief of orthopedic surgery at Beckley Memorial Hospital, presented a paper on "Pediatric Orthopedics."

PG Course on Medical Genetics

The American College of Physicians will sponsor a postgraduate course on "Medical Genetics" at the University of Michigan School of Medicine in Ann Arbor, Michigan, January 29-February 1, 1962.

Dr. James V. Neel, who will serve as director, announced that the course will attempt to present a bird's-eye view of contemporary medical genetics, with special reference to conditions of interest to the internist.

Further information may be obtained by writing the American College of Physicians, 4200 Pine Street, Philadelphia 4, Pennsylvania.

Relocations

Dr. Lyle H. Boyea, who has served as a member of the staff at Beckley Memorial Hospital since 1958, has moved to Aurora, Minnesota, where he is associated with the East Range Clinic.

* * * *

Dr. Richard J. Browning of Charleston has completed a three-year Fellowship in internal medicine at the Mayo Clinic in Rochester, Minnesota, and has returned to Charleston where he is associated in practice with Drs. Pat A. Tuckwiller, A. B. Curry Ellison, James H. Getzen and John M. Hartman.

State Physicians Planning to Attend AMA Meeting in Denver

More than 3,000 physicians are expected to attend the 15th annual Clinical Meeting of the American Medical Association which will be held in Denver, Colorado, November 26-30.

General headquarters for the meeting will be the Denver-Hilton Hotel, where the House of Delegates will meet several times during the meeting. The scientific program, including lectures, symposia, medical motion pictures, color television and scientific and technical exhibits will be held at the Denver Municipal Auditorium.

State Delegates to Attend Meeting

Dr. Frank J. Holroyd of Princeton and Dr. Charles A. Hoffman of Huntington are the official delegates from the State Medical Association and will attend all sessions of the AMA House of Delegates. The alternate delegates from West Virginia are Dr. Thomas G. Reed of Charleston and Dr. J. C. Huffman of Buckhannon.

Scientific Program

Dr. Samuel P. Newman of Denver, chairman of the AMA Council on Scientific Assembly, said that the members of his Council placed emphasis on new research developments in planning the program.

One of the features of the meeting will be a study of heredity as it relates to human ills. Geneticists are rapidly advancing fundamental knowledge in this highly important medical field. This new knowledge will be passed on to clinicians for their guidance in practice.

"Genes, Chromosomes and Human Disease" will be the general subject of the section, under chairmanship of Dr. Leroy J. Sides of Denver.

Dr. Theodore T. Puck, head of the Department of Biophysics at the University of Colorado, will relate some of his new research findings in a paper entitled "The Gene and the Protein Molecule."

Other topics will include "Genes and Chromosomes," by Dr. David M. Bonner, University of California biologist; "Hereditary Aspects of Disease," by Dr. Walter Burdette, Salt Lake City; and "Hemoglobinopathies," by Dr. Max Wintrobe of Salt Lake City.

Dr. John H. Talbott of Chicago, Editor of the *Journal of the American Medical Association*, will deliver a paper on "Gout" as a part of this section.

Much has been learned by the specialists in space medicine that will be of value to the practicing physician in treating patients who seldom get off the ground. This knowledge also will be presented in a section in space medicine at the meeting.

"The Impact of Space Medicine Research on General Medicine" will be presented by Dr. Hubertus Strughold, advisor for research to the commander, Aerospace Medical Center, Brooks Air Force Base, Texas.

Other space medicine topics will include "The N.A.S.A. Program in Life Sciences," by Brig. Gen. Charles H. Roadman, deputy director of the life sciences division of the National Aeronautics and Space Administration, Washington; "The Air Force Program in Aerospace Medicine," by Maj. Gen. Oliver K. Niess, surgeon general of the U.S. Air Force, Washington; and "Space Radiations: Their Physical Characteristics and Biological Implications," by Col. Gerrit L. Hekhuis, chief of radiobiology, School of Aerospace Medicine, Brooks Air Force Base.

An interesting series of papers will be presented at special breakfast programs, November 28-29. Topics for the November 28 breakfast session will be "The Malmstrom Vaccum Extractor in Obstetrics;" "A Pyelogram Clinic;" and "The Operation of a Poison Control Center."

On November 29, topics will be "Community Care of Psychiatric Patients vs. Prolonged Institutional Care"; "Dermatology Quiz Session," and "Unusual Diagnostic Problems in Pulmonary Surgery."

A series of color television programs during the meeting will include such subjects as "The Art of Psychiatric Interviewing," "Resuscitation of the Newborn," "Total Abdominal Hysterectomy," "Primary Dermatologic Disorders" and "Dermatologic Manifestations of Systemic Disease."

Also scheduled is an outstanding program of medical motion pictures to be screened daily during the sessions.

Public Spends Millions Annually On Medical Quackery

George P. Larrick, Commissioner of the Food and Drug Administration, Department of Health, Education and Welfare, said recently that consumers spend more than $1 billion a year "needlessly on falsely represented drugs, foods and cosmetics."

Speaking before the National Congress on Medical Quackery in Washington on October 6, Commissioner Larrick said that the cost of vitamin and so-called health food quackery alone has been "estimated conservatively at $500 million a year." He also said that there were three major kinds of quackery from the standpoint of protecting the public by both law enforcement and education—fake medical devices, pseudo science in nutrition and false claims for drugs and cosmetics.

The Congress was sponsored jointly by the AMA and the Food and Drug Administration.

PG Course on Fractures

A postgraduate course on "Fractures in General Practice" will be presented at the Medical College of Georgia in Augusta, November 14-16. The course will emphasize the diagnosis and treatment of the more common fracture problems encountered in general practice, and is acceptable for 18 hours of credit by the American Academy of General Practice.

Registration fee for the three-day meeting is $50. Further information may be obtained by writing Dr. Claude-Starr Wright, Director, Department of Continuing Education, Medical College of Georgia, Augusta.

Report of State Health Department For Fiscal Year 1960-61

Effectiveness of the Salk Vaccine has been further substantiated by a continuing decline in the number of cases reported in West Virginia, according to Dr. N. H. Dyer, State Health Director.

In a recent report to Governor Barron covering activities of the State Health Department for the 1960-61 fiscal year, Doctor Dyer said 64 cases were recorded during the period as compared to 196 for the preceding year.

Specimens suitable for laboratory study were procured from 48 (75 per cent) of the patients and examined by the State Hygienic Laboratory. The results: Polio Type 1, 13; Type 2, 0; Type 3, 2; Mixed 2 and 3, 2; Negative Isolation, 31. No other cytopathogens were identified.

Doctor Dyer said that complete recovery was reported on 20 cases and 11 cases had minor involvement. Final diagnosis indicated 47 cases reported as paralytic polio. Of these 33 had not received the full course of vaccine and 14 had received three or more injections. Of the 14 paralytic cases fully vaccinated, there were no fatalities, four full recoveries, four with minor involvement, six with significant disability and none were severely disabled. There were 4 deaths due to bulbar poliomyelitis, two of whom were over 20 years of age and none of whom was fully vaccinated.

Other highlights of Doctor Dyer's report:

The Rheumatic Fever Control Program faces curtailment unless state funds are made available to provide for a rapidly expanding case load. At the year's end there were 2,347 patients listed on the rheumatic fever registry, of which 1,440 were active for routine shipments of penicillin or bicillin. Cost of drugs was $19,286.

The program is supported by the West Virginia Heart Association with matching federal aid. Patients certified as medically indigent by physicians are eligible to receive drugs. Routine bimonthly shipments are made to physicians and they distribute the drugs to patients at monthly intervals, providing for monthly routine medical observation of the patient. Only 33 recurrences were reported during the year.

Shortage of Funds Curtails Programs

A Diabetes Register lists 721 patients but national statistics indicate there are undoubtedly several thousand West Virginians who have this disability and are not aware of it. A shortage of funds prevents accentuating a detection program.

Acceptance of cases for diagnosis under the Cancer Control Program was discontinued for the last 45 days of the fiscal period because of lack of funds. A significant increase in requests for financial assistance was noted as a result of depressed economic conditions in the state.

At the end of the calendar year, there were 4,563 cases on the active tuberculosis registry, with 810 of these in sanitoria and 3,753 at home. There were 676 newly reported cases and 105 deaths from tuberculosis. Of the deaths, 35 had not been previously reported as tuberculosis.

A sharp increase in infectious hepatitis was noted with 37 counties reporting a total of 906 cases. Among other diseases receiving epidemiological surveillance were: typhoid fever, 14; diphtheria, 4, encephalitis infections, other, 9; meningococcal infections, 26; meningitis, aseptic, 43; Rocky Mountain Spotted Fever, 3; dysentery, amebic, 3; dysentery, bacillary, 4; and trichinosis, 5.

Fluoridation of Water

During the past year, four new public water systems, serving an estimated 58,000 persons, began fluoridation in the communities of Gary, Morgantown, Vienna and Terra Alta. This brings to 702,912—or slightly more than 71 per cent of the state's population served by a community water system—the number of persons now drinking fluoridated water in an effort to reduce the prevalence of tooth decay.

Since the beginning of the Hill-Burton Program in 1947, the State Board of Health has allocated more than $28 million in federal assistance for the construction of medical facilities costing in excess of $74 million.

Included in the program were 60 individual projects representing the construction of 13 new general hospitals, 32 additions to general hospitals and state institutions, 7 nurses residences and training schools, 5 new public health centers, one new nursing home, one new rehabilitation center and the State Hygienic Laboratory.

Among the more acute needs still existing, however, the report lists chronic disease and nursing home facilities where approximately 5,000 additional beds are required to provide adequately for the aged and chronically ill.

Budget Request

In his report, Doctor Dyer emphasized that West Virginia continues to lag far behind surrounding states in expenditures for public health, including those states with a lower per capita income.

With regard to the State Health Department budget request for next year, Doctor Dyer told the Governor: "We have endeavored to keep in mind all factors to be considered in making an allocation and, especially, economic conditions. Our request will contain only the absolute minimum considered necessary to provide basic and essential health services. During all administrative and legislative deliberations on this matter we ask only that it be kept in mind that we seek a realistic approach to protecting the most priceless asset of our state: the health of its people.

Blue Shield Enrollment

The National Association of Blue Shield Plans announced recently that more than 48 million persons are enrolled in the 75 Blue Shield Plans located in North America as of June 30, 1961.

The Association also reported that Blue Shield now covers more than one-quarter of the total United States population and almost 15 per cent of the total Canadian population.

New Association Members

Dr. Albert Lanham Allen, 722 First Huntington National Bank Building, Huntington (Cabell). Doctor Allen was born in Spartanburg, South Carolina, and was graduated from Wofford College in 1929. He received his M. D. degree from the Medical College of South Carolina in 1933, and served an internship at St. Luke's Hospital in Jacksonville, Florida, 1933-34. He served a residency at Duke University Hospital, 1949-52. He served as a Captain in the Royal Army Medical Corps of Great Britain during World War II. He was previously located in Ashland, Kentucky. His specialty is radiology.

* * * *

Dr. W. Rexford Duff, 606 Third Avenue, Montgomery (Fayette). Doctor Duff, a native of Poca, West Virginia, was graduated from the University of Virginia in 1955. He received his M. D. degree from the University of Cincinnati School of Medicine in 1959, and served an internship at Charleston General Hospital, 1959-60. He is engaged in general practice.

* * * *

Dr. Jimmie L. Mangus, 309 41st Street, S. E., Charleston (Kanawha). Doctor Mangus was born in Hurricane, West Virginia, and was graduated from the two-year School of Medicine at West Virginia University in 1957. He received his M. D. degree from the Medical College of Virginia in 1959, and served an internship at Charleston Memorial Hospital, 1959-60. He is engaged in general practice.

* * * *

Dr. Bradford McCuskey, 60 14th Street, Wheeling (Ohio). Doctor McCuskey, a native of Denver, Colorado, received his M. D. degree from Jefferson Medical College at Philadelphia in 1955. He interned at Walter Reed Hospital in Washington, D. C., 1955-56, and served residencies at St. Luke's Hospital in Denver, 1956-57, and Jefferson Medical College, 1957-60. His specialty is urology.

* * * *

Dr. Robert R. Trotter, 2917 University Avenue, Morgantown (Monongalia). Doctor Trotter was born in Morgantown and was graduated from West Virginia University and the two-year School of Medicine. He received his M. D. degree from Temple University School of Medicine in 1942, and served an internship at the Pennsylvania Hospital in Philadelphia, 1942-43. He served a residency at the Massachusetts Eye and Ear Infirmary in Boston, 1949-51, and was a fellow in ophthalmology at Harvard Medical School. He served for three years as a Captain in the Medical Corps of the U. S. Army during World War II. His specialty is ophthalmology.

Chemotherapy in Cancer

A conference on "Chemotherapy in Cancer," sponsored by the Virginia Division of the American Cancer Society, will be held at the University of Virginia School of Medicine in Charlottesville, November 17-18.

Further information concerning the two-day meeting may be obtained by writing University of Virginia Hospital, Box 329, Charlottesville, Virginia.

Huntington Physicians Participate In Television Series

Physicians in the Huntington area are participating in a series of public service programs currently being televised on alternate Sundays by WSAZ-TV, in Huntington, from 5:00-5:30 P. M.

The television station, in cooperation with the Cabell County Medical Society, is presenting the half-hour program to acquaint the public with the latest advances in medicine and surgery.

C. Tom Garten, general manager of WSAZ-TV, said the public will be exposed to a broad range of topics. Special films showing actual hospital care and treatment, and others dealing with surgical procedures, will be integrated into each of the 30 half-hour shows. Host for the program, entitled "Conference," is Bob Murray.

Eight physicians appeared on programs during September and October. Drs. C. Stafford Clay, James A. Heckman and Jack Leckie participated in the premiere program on September 24 which dealt with the subject, "How Does Progress in Medical Science and Research Affect Every Citizen?"

Dr. James A. Heckman participated in the first of a series of public service programs currently being televised on alternate Sundays by WSAZ-TV, in Huntington.

The subject of the second program on October 8 was "Emotional Tensions in the Modern World." The participants were Drs. C. G. Polan, Gerald J. Eder and Thelma V. Owen. Drs. Samuel Biern, Jr., and Joseph M. Farrell used case studies to illustrate, "Intelligent Approach to Diet," which was the subject of the program on October 22.

Dr. Gates J. Wayburn, Clarence H. Boso and Harvey S. Klein will appear on the November 5 program which will be concerned with the subject, "Recent Advances in Obstetrics."

"Is It Cancer?" will be the subject for the November 19 program, with Drs. Chauncey B. Wright, James P. Carey, Walter R. Wilkinson and M. Homer Cummings, Jr., scheduled as participants.

Telecast dates and subjects for the programs in December are as follows: December 3—Arthritis and Rheumatic Diseases; 17—New Ways of Looking Into the Body; 31—The Allergist—Medical Detective.

Foreign Fellowship Program Sponsored By Assn. of Medical Colleges

The Association of American Medical Colleges announced recently that applications are being accepted from junior and senior medical students for participation in a foreign fellowship program, which offers future American physicians an opportunity to study and practice preventive medicine in underdeveloped areas of the world.

For the third year, Smith, Kline and French Foreign Fellowships are being offered to students in medical schools throughout the country. During the past two years grants totaling some $100,000 were made to 59 students under the program. Awards are made from a $180,000 fund provided by the Philadelphia pharmaceutical firm.

The purpose of the program is to provide selected medical students the opportunity to benefit from unusual clinical experiences abroad. The average period of time spent abroad by students is about 12 weeks, and the grants provide money for travel costs and living expenses at the site of the student's overseas program.

Applications will be processed by a special committee comprised of six American medical educators, and award winners will be announced in March, 1962.

Additional information concerning the program may be obtained by writing the Association of American Medical Colleges, 2530 Ridge Avenue, Evanston, Illinois.

AMA Conference on Sports Injuries In Denver, November 26

The third national conference on the "Medical Aspects of Sports," sponsored by the American Medical Association, will be held in conjunction with the AMA Clinical Session in Denver, Colorado, on November 26.

The one-day meeting will feature lectures and panel discussions on conditioning of the athlete, prevention and treatment of injuries, functions of the team physician, and training methods and procedures.

Athletic physiology and athletic dermatology will be discussed at a luncheon meeting, and there will be a speaker and several new films on sports medicine at the evening session.

Physicians who desire to attend the meeting should contact the AMA Committee on the Medical Aspects of Sports, 535 North Dearborn Street, Chicago 10, Illinois.

PG Course on Electrocardiography

A postgraduate course on "Advances in Electrocardiography," sponsored by the American College of Physicians, will be held at the New York University Medical Center in New York City, December 4-8. Dr. Charles E. Kossmann will serve as director of the course and registration is limited to 120.

Further information may be obtained by writing the American College of Physicians, 4200 Pine Street, Philadelphia 4, Pennsylvania.

Dr. T. H. McGavack Named President Of W. Va. Diabetes Assn.

Dr. Thomas H. McGavack of Martinsburg was elected president of the West Virginia Diabetes Association during the annual meeting which was held at the West Virginia University Medical Center in Morgantown on September 16. Other new officers were elected as follows:

Dr. Richard V. Lynch, Jr., of Clarksburg, president elect; Dr. Lyle D. Vincent of Parkersburg, vice president; and Dr. William C. Revercomb, Jr., of Charleston, secretary-treasurer.

Two members of the faculty of the School of Medicine presented papers during the scientific session. Dr. Edmund B. Flink, professor and chairman of the Department of Medicine, presented a paper on "Treatment of Diabetic Acidosis," and Dr. Margaret Albrink, associate professor of medicine, discussed "Carbohydrate Metabolism in Vascular Disease."

Dr. Marion F. Jarrett of Charleston, the retiring president, presided at the scientific and business sessions held during the one-day meeting.

Dr. George P. Heffner of Charleston presented a report of the 1961 camping period at Camp Kno-Koma.

Annual PG Course in Diabetes

The 10th postgraduate course of the American Diabetes Association, "Diabetes in Review; Clinical Conference, 1962," will be held in Detroit and Ann Arbor, Michigan, January 17-19.

Scientific sessions will be held at the Statler-Hilton Hotel in Detroit during two days of the meeting, and lectures on the third day will be held at the University of Michigan in Ann Arbor.

Dr. T. S. Danowski of Pittsburgh, chairman of the Association's Committee on Professional Education, will serve as director of the course.

Registration fee for the three-day meeting is $40 for members, and $75 for non-members. Additional information may be obtained by writing the American Diabetes Association, 1 E. 45th Street, New York 17, New York.

Dr M. H. O'Dell Named President OF W. Va. Heart Association

Dr. Morris H. O'Dell of Charleston was installed as president of the West Virginia Heart Association at the annual meeting held at the West Virginia University Medical Center in Morgantown on September 15. He succeeds Dr. Andrew C. Woofter of Parkersburg.

Other officers were elected as follows:

Dr. J. Keith Pickens of Clarksburg, president elect; Dr. Otis G. King of Bluefield, vice president; Mrs. Seth Savage of Vienna, secretary; and R. E. Plott of Charleston, treasurer (reelected).

Dr. Woofter presided at the scientific and business sessions held during the one-day meeting. A banquet was held at the Morgantown Country Club on Friday evening.

Physicians Needed for Service As Medical Missionaries

During the annual meeting of the American Medical Association held in New York City in June, the House of Delegates approved a plan to cooperate in the recruitment of volunteer physicians for emergency service in the foreign mission field.

The AMA Department of International Health is seeking the names of physicians who will volunteer to serve in the mission field on a temporary basis. Cooperating with the AMA in this program are missionary agencies representing every denomination sponsoring American medical missionaries.

Five physicians from Tulsa, Oklahoma, members of the First Presbyterian Church in that city, are giving up their practices for six-week periods this fall to serve voluntarily at the Miraj Medical Center in Miraj, India. The project is endorsed by the Tulsa County Medical Society and funds for medical equipment, transportation and other expenses were raised through church and public contributions.

Physicians interested in volunteering for such services may obtain additional information by writing to the AMA Department of International Health, 535 N. Dearborn Street, Chicago 10, Illinois.

Medical Meetings, 1961-62

The following is a partial list of national, state and district medical meetings scheduled for 1961-62:

1961

Nov. 6-9—Southern Medical Assn., Dallas, Texas.
Nov. 11—Pediatric Conference, WVU School of Medicine, Morgantown.
Nov. 13-16—Interstate PG Assembly, Cleveland.
Nov. 13-17—American PH Assn., Detroit, Mich.
Nov. 17-21—National Society for Crippled Children, Denver.
Nov. 27-Dec. 1—AMA Clinical Meeting, Denver.

1962

Apr. 9-12—AAGP, Las Vegas, Nevada.
Apr. 22-25—W. Va. Acad. Oph. and Otol., White Sulphur Springs.
May 25-27—W. Va. Chap. AAGP, Charleston.
June 6-8—W. Va. PH Association, Huntington.
June 24-28—AMA Annual Meeting, Chicago.
Aug. 23-25—W. Va. State Medical Association, The Greenbrier, White Sulphur Springs.
Nov. 26-29—AMA Clinical Meeting, Los Angeles.

Frank E. Bunts PG Course

A Postgraduate Course on "Clinical Pathology" will be presented by The Frank E. Bunts Educational Institute, which is affiliated with the Cleveland Clinic Foundation, in Cleveland, November 9-10.

The registration fee is $25 and registrations will be limited to 125. Further information may be obtained by writing Dr. Charles L. Leedham, Director of Education, The Frank E. Bunts Educational Institute, 2020 E. 93rd Street, Cleveland 6, Ohio.

There is nothing in the world so much admired as a man who knows how to bear unhappiness with courage.—Seneca.

Film on 110th Annual AMA Meeting Produced by Schering Corp.

Medifilm Report III, presenting highlights of the 110th Annual Meeting of the American Medical Association in New York City last June, is now available for showings before medical and allied groups. The film was produced by Schering Corporation in cooperation with the AMA Department of Medical Motion Pictures and Television.

The 33-minute, 16mm. black and white sound film features scientific exhibits, lectures and panel discussions. Of special interest is a demonstration of external cardiac massage at the 1961 Gold Medal Award exhibit manned by Drs. Guy Knickerbocher and W. B. Kauwenhoven, both of Baltimore. A manikin is used to show the actual technique of closed chest cardiac massage.

County medical societies may obtain a copy of the film by writing to the AMA Film Library, 535 N. Dearborn Street, Chicago 10, Illinois, or to the Audio-Visual Department, Schering Corporation, Union, New Jersey.

Let's Face Facts

We are now being scrutinized by the general public more than ever before, so we were told by our new president, Dr. Leonard W. Larson, at the American Medical Association meeting in New York.

I am convinced it is imperative that we follow his suggestion of self-disciplinary action. We still hear too many complaints of exorbitant charges, patients unable to obtain the services of a physician, over utilization of hospitals, and increased charges because a patient has insurance coverage; and we still hear too many criticisms of our medical organizations from the AMA down to the county society.

It is not unusual to pick up a metropolitan newspaper these days and find an article criticizing the profession or one of its members. Let's face the facts: there is a minority in our midst that is undoing the great good of the majority. We have many friends throughout the United States. Let us do everything we can to keep these friends. Let us encourage self-disciplinary action by our societies and keep our profession above reproach. We cannot tolerate anyone breaking the code of ethics of our profession or increasing the cost of medical care by over charges and over utilization of hospitals.—Harvey Renger, M. D., in Texas State Journal of Medicine.

New ACS Fellows

Six West Virginia surgeons were among those inducted as Fellows of the American College of Surgeons during the Annual Clinical Congress in Chicago, October 2-6. The names of the surgeons are as follows:

Drs. Herbert G. Dickie, Jr., Wheeling; Ralph J. Holloway, South Charleston; Shen K. Wang, Barracksville; and Julius L. Berkley, Kenneth E. Blundon and Carl J. Roncaglione, all of Charleston.

Should Amateurs Make Decisions For the Professionals?

A bill recently introduced in the Congress would ban the patenting of a new drug unless the manufacturer could prove that it was significantly more effective than all similar drugs now available. This well intended if somewhat naive proposal is an interesting example of how the plausible can become the mischievous. If the bill passes, Government will somehow determine the relative efficacy of each new drug. Similar criteria, one might suppose, would be applied to cigarets, automobiles, television sets and cocktails. Let us permit only the best pencils, pickles, or penicillin to be sold.

Only an amateur would suppose that drug efficacy can be determined that simply. If a drug is potent, it is also potentially dangerous. At what point does the danger outweigh the benefit? How does the federal agency allow for personal idiosyncracy of patients? Is a pleasantly flavored vehicle enough to warrant a patent if there is no change in pharmacologic effectiveness? How do you appraise therapeutic efficiency in human beings without trying the drug before it is made available for human use? Do you release it on the basis of animal experiments only? How does a Government tribunal weigh the placebo effect, the suggestive effect, and effect of the practitioner's art on the workings of a new pharmaceutical?

Of course the Federal Government can by a simple act of Congress create a Section for the Appraisal of Pharmaceuticals (to be identified by its capital initials), and thus the Voice of Authority will tell us what is good for us. The Voice of Authority once rejected Lister's theory of antisepsis, Jenner's vaccination against small pox, Semmelweiss' report on the cause of puerperal fever—not to mention Auenbrugger's discovery of the value of chest percussion. Federal appraisal of drug efficiency offers a road well paved with good intentions—and fraught with the mischief that often comes when amateurs make technical decisions for the professionally trained.—Journal of the Medical Society of New Jersey.

Pfizer Produces Film on New Oral Poliovirus Vaccine

A new film "The Next Step," produced by Pfizer Laboratories, is now available for showings before county medical societies.

The 16 mm. black and white sound motion picture, which was premiered at the annual meeting of the American Medical Association in June, presents detailed information on the development, manufacture, testing, immunization properties, and methods used in clinical dispensing of the new live, oral poliovirus vaccine (Sabin) now pending licensure for general use in the United States.

The film was produced as a professional information service to physicians, public health groups, nurses and pharmacists. Prints of the film may be obtained by writing to Pfizer Laboratories, Division of Chas. Pfizer and Company, Inc., 235 E. 42nd Street, New York 17, New York.

Highway Safety and Seat Belts

The plan of the automobile industry to provide safety belt attachments in the automobiles of 1962 is an excellent one. It is well known that people who wear safety belts while riding in their automobiles in general survive accidents better than those who do not wear them.

There are, however, two huge problems remaining to be solved. The first is to persuade car owners to buy safety belts (only the attachments will be provided), and the second problem is to get people to use them.

Once the attachments are standard equipment, the automobile industry, the medical profession, and others such as the police, state and local governments, the press, radio, and television should combine to do a real selling job. It will require a major promotional effort, and success will not come quickly.

No one wants to be reminded of disaster while pursuing pleasure. It will not be easy to get the family to fasten seat belts while they are enjoying a pleasant Sunday afternoon drive. It will be the last thing on the minds of young men and their girl friends as they start on an evening of courtship.

With the business of hardware for seat belts out of the way the automobile industry should start building other safety features into the automobiles themselves, such as double-locked doors and steering levers. In the meantime the seat belt attachment is a definite improvement, and it directs attention to the basic fact that safety is everybody's business. Let us all get behind this movement.—Rhode Island Medical Journal.

No Finer Opportunity

Early in the Kefauver hearings, the subcommittee invited testimony from the Arthritis and Rheumatism Foundation. There followed appalling disclosures that some $250 million are spent each year by arthritics on useless quack cures. Considering the close attention of the press and public to these proceedings, never had a Congressional inquiry been handed a finer opportunity to launch a public crusade and mobilize national resources to stamp out criminal operatives in the health field. And what happened? Nothing.

The investigators were far more interested in getting back to the assault on manufacturers of cortisone and its derivatives which have actually restored millions of cripples and potential cripples to useful, productive life.—Austin Smith, M. D., President, Pharmaceutical Manufacturers Association.

ACCP Postgraduate Course

A postgraduate course on "Recent Advances in the Diagnosis and Treatment of Diseases of the Heart and Lungs," sponsored by the American College of Chest Physicians, wil be held at the Statler-Hilton Hotel in Los Angeles, California, December 4-8.

Registration fee for members is $75, and $100 for non-members. Further information may be obtained by writing the American College of Chest Physicians, 112 East Chestnut Street, Chicago 11, Illinois.

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Pitfalls in Colon Surgery*†

(With Case Reports)

Harold P. Dinsmore, M. D., James E. Boggs, M. D., James P. Eaton, M. D., and Bert Bradford, Jr., M. D.

Education of the public has been ineffective regarding the significance of alterations in bowel habit and of rectal bleeding. Too many patients with far advanced carcinoma of the colon and rectum are seen. Many patients delay in reporting symptoms to their physician while others report symptoms early, but the physician fails to recognize the significance of the complaints or to make an adequate examination.

In spite of the lower operative mortality rate and the higher operable and resectable rates, there has been little change in the five-year survival rate for carcinoma of the colon and rectum. This is due largely to delay in diagnosis.[1] To mis-diagnose cancer of the colon and rectum in the early stages is, in the majority of the cases, the result of listening inadequately to the patient's complaints. Any change in bowel habit or any bleeding should be investigated thoroughly. Early diagnosis may depend upon paying attention to relatively nondescript symptoms, investigating otherwise unexplained anemia, and carrying out appropriate diagnostic studies. In approximately 50 per cent of cases, cancer of the colon and rectum can be diagnosed by rectal examination; in at least 65 per cent it can be diagnosed by proctosigmoidoscopic study and in approximately 35 per cent by a barium study of the colon.[2, 3] Many times, the lesion will be too extensive for curative resection if the typical triad of cramping abdominal pain, altered bowel function, and melena must be present before carcinoma is suspected. To omit adequate digital and proctosigmoidoscopic examinations and barium studies of the colon where there is rectal bleeding or change in bowel function is as unpardonable as omitting an intravenous pyelogram in the case of the patient with hematuria.

Rectal bleeding should not be ascribed to hemorrhoids only. We continue to see patients who have undergone anorectal surgery for a benign condition in the presence of an unsuspected neoplasm of the colon. No patient past the age of 35 years should undergo anorectal surgery until after proctosigmoidoscopic and barium studies of the colon have been carried out.[4] If this rule is adhered to, more polyps and neoplasms of the colon will be diagnosed early. In addition, the early diagnosis of cancer of the colon and rectum is aided by looking for antecedent or precursor lesions such as polyp, poly-

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*Presented by Doctor Dinsmore before the annual meeting of the West Virginia Chapter, American College of Surgeons, at The Greenbrier in White Sulphur Springs, April 14, 1961. This paper was judged second best among those presented by residents from hospitals throughout the state.

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Submitted to the Publication Committee, July 19, 1961.

posis and ulcerative colitis, or prior operations for cancer of the colon.

It is definitely established that there is a direct relation of adenomatous polyp, polyposis and ulcerative colitis to carcinoma of the colon and rectum.[5]

Significance of the Polyp

An accurate estimate of the true incidence of polyp depends upon the source and nature of the material studied. The average incidence detected by routine proctoscopic and barium studies of the colon and rectum is approximately 5 per cent. In one study, a follow-up four to nine years later, it was noted that a new polyp developed in approximately 40 per cent of cases, indicating the need for periodic examination.[6] The most frequent symptom associated with polyp is rectal bleeding, although in two-thirds of the cases of colon or rectal polyp there are no symptoms. The average age incidence for polyp is somewhat younger than that for carcinoma and if the polyp is to be excised prior to malignant change, let it be done before the patient reaches the prevalent age incidence for carcinoma.[3]

Over 50 per cent of polyps of the rectum and colon are within reach of the proctosigmoidoscope. This indispensable instrument should be always available and used more frequently by every practitioner of preventive and curative medicine, and proctosigmoidoscopy should be a part of the complete physical examination of all patients past the age of 35 years.[7] If a polyp is discovered on sigmoidoscopy, a barium study of the remaining colon is distinctly indicated since there is a 25 per cent chance that another polyp is present.

In a certain per cent of cases the history is indicative of a lesion of the colon, but all studies are normal. These patients should be restudied at a later date to rule out "hidden" carcinoma or a small polyp. "Hidden" carcinoma is that which may be overlooked because it is located in one or another segment of the large bowel which often is obscured by the barium, the most common sites being the hepatic flexure, the splenic flexure and the sigmoid colon. Redundancy of the colon in these regions increases the possibility of concealment.[8]

Just as errors are made in the early detection of carcinoma of the colon and rectum, so are they made, by surgeons with excellent training, in the differential diagnosis. Carcinoma of the ovary, carcinoma of the uterus, intestinal obstruction, appendicitis, diverticulitis and chronic inflammatory lesions of the rectum are conditions more commonly mistaken preoperatively for carcinoma of the colon or rectum.

Case Reports

The following case reports illustrate some of the sources of error in the preoperative diagnosis of carcinoma of the colon and rectum.

Case 1.—A 41-year-old male with bright red rectal bleeding, diarrhea, a 40-pound weight loss, and anorexia for the previous four months was admitted to the hospital. He had had a hemorrhoidectomy in another hospital one month prior to admission. Barium enema studies revealed nearly complete obstruction at the junction of the descending and sigmoid colon. Left hemicolectomy was performed and the patient made a good recovery.

Comment.—The source of error here was the failure of the surgeon performing the hemorrhoidectomy to listen to the patient's history and perform colon studies prior to anorectal surgery. It is well known that asymptomatic hemorrhoids may become symptomatic if a lesion develops proximally to increase the venous pressure. Occasionally, patients with an acute anorectal condition are unable to tolerate sigmoidoscopy and other colon studies. In these cases, we routinely make a sigmoidoscopic examination under anesthesia. Practically all rectal surgery is done under spinal anesthesia and with the subsequent jackknife position this procedure is easily accomplished.

Case 2.—A 79-year-old white male was first admitted to the hospital in September, 1959, complaining of weakness, anorexia, cough, chills, fever and upper abdominal pain. A chest x-ray revealed pneumonitis of the right lower lobe and an upper gastrointestinal series disclosed a small, sliding esophageal hernia. The hemoglobin was 8.3 Gm. He was discharged from the hospital with the diagnosis of pneumonia, pulmonary emphysema, chronic bronchitis and hiatal hernia.

He was readmitted six weeks later complaining of weight loss, anorexia, tarry stools and almost continuous upper abdominal pain. In addition, he had vomited several times since his last admission.

On examination, there was a large mass filling the right flank of the abdomen and inseparable from the liver. A repeat of the upper gastrointestinal series revealed, in addition to the small hiatal hernia, a large polypoid lesion of the second portion of the duodenum, interpreted by the radiologist as adenocarcinoma of the duodenum. Following correction of the anemia the patient was scheduled for surgery. When the

abdomen was opened, it was found that a large mass involving the cecum had invaded the second portion of the duodenum. The liver was free of metastasis. Since the bowel had not been prepared preoperatively, the surgeon elected to postpone further surgery.

After preparation of the bowel, the patient was returned to surgery one week later. Right hemicolectomy, duodenectomy and resection of the head of the pancreas were carried out. The patient did well until the 9th postoperative day when a pancreatic fistula developed. Following this he continued to go downhill and expired on the 13th postoperative day. At autopsy a pancreatic fistula, a large retroperitoneal abscess secondary to the fistula and multiple pulmonary infarcts were noted.

Comment.—It is obvious that several errors were made in this case. During the first admission the history was inadequate because there was no mention of melena which had been present for several months. The anemia was attributed to the sliding esophageal hernia without further studies.

The error during the second admission consisted of the failure of the surgeon to order a barium enema prior to surgery; the possibility of a primary lesion of the duodenum is not as great as that of a secondary lesion. The operation was extensive but at autopsy there was no evidence of residual tumor.

Case 3.—A 49-year-old woman was admitted for elective cholecystectomy. A cholecystogram prior to admission had revealed a functioning gallbladder containing multiple stones. Her chief complaints were intermittent upper abdominal pain, dysuria and frequency of urination. The history contained no reference to any change in bowel habit. Routine laboratory studies (CBC and urinalysis) were within normal limits. Chest x-ray and intravenous pyelogram were reported as normal.

At surgery, a large mass approximately 7 to 8 cm. in diameter occupied the midtransverse colon, with multiple metastatic nodules in the liver. Since there was no evidence of obstruction, pre-cecostomy was performed following biopsy of the liver.

Comment.—The presence of carcinoma of the transverse colon was not suspected. The sources of error were over-reliance on the x-ray findings of gallstones as an explanation of the symptoms, and an inadequate history and physical examination.

Case 4.—A 57-year-old male was admitted to the hospital because of anemia, weight loss, constipation and vague abdominal complaints. Approximately six months prior to admission, he had had a barium enema and proctosigmoidoscopic examination elsewhere because of several episodes of rectal bleeding. These had been interpreted as normal. In the hospital, an upper gastrointestinal series and other laboratory studies were reported within normal limits, with the exception of the hemoglobin which was 9.5 Gm. He was discharged on iron therapy.

Following proctosigmoidoscopy, a repeat barium enema demonstrated a large filling defect in the splenic flexure of the colon. At surgery, rather extensive carcinoma of the splenic flexure was found. On the third postoperative day the patient had a severe anaphylactoid reaction to intravenous Dextran characterized by severe shock and bronchospasm. He responded to adrenalin, hydrocortisone and phenergan. Following this, acute renal failure developed which was attributed to the Dextran reaction. He continued to do poorly and died on the 14th postoperative day. Death was attributed to the anaphylactoid reaction. There was no autopsy.

Comment.—The important source of error was failure to visualize the neoplasm because it was located in a segment of the large bowel which often is obscured by the barium in adjacent, overlying segments on the routinely made films. It is doubtful that the patient was turned properly during fluoroscopic examination in order to visualize the flexures of the colon. Another error in this case was that the patient's physician failed to emphasize the importance of follow-up studies in attempts to determine the source of the rectal bleeding.

Case 5.—A 47-year-old female was admitted for left ovarian cystectomy. She was first seen in the Surgical Clinic at which time she was complaining of intermittent pain in the left lower quadrant of the abdomen. She was two years postmenopausal. There was no change in bowel habit except for constipation.

On pelvic examination, there was fixed irregular mass about the size of a grapefruit on the left. A flat plate of the abdomen confirmed the presence of a mass in the pelvis with scattered areas of calcification. The radiologist's interpretation was pseudomucinous cyst of the ovary with psomma bodies. An intravenous pyelogram was reported as normal.

At operation, there was extensive carcinoma of the sigmoid colon. Wide anterior resection with primary low anastomosis was performed. The patient made an uneventful recovery.

Comment.—Extensive carcinoma of the sigmoid colon was not suspected. To differentiate between a lesion of the left ovary and a lesion of the sigmoid colon can be extremely difficult at times. Errors would be made less frequently if intravenous pyelograms and barium enema studies were made in all cases prior to any major pelvic surgery. It was also an error for the surgeon to rely too strongly on the radiologist's interpretation.

Summary

Some of the pitfalls in colon surgery are discussed. A carefully elicited history and an adequate physical examination, when indicated, will improve the results of colon surgery. Digital examination, sigmoidoscopy and colon studies are necessary in all cases of a suspected lesion. Anorectal surgery, especially in cases in which the patient is past the age of 35, should not be done until an adequate study of the entire colon has been made. Hemorrhoids seldom cause severe anemia, and more thorough examination of the colon is necessary before contemplating surgery. Routine barium enema studies should not be made until proctosigmoidoscopy has been accomplished.

References

1. Swinton, S. W. & Counts, R. L.: Cancer of Colon and Rectum: Statistical Study, with End-Results, J. A. M. A. 161:1139, 1956.
2. Portes, C. & Majarakis, J. E.: Proctosigmoidoscopy—Incidence of Polyps in 50,000 Examinations, J. A. M. A. 163:411, 1957.
3. McMillan, F. L. & Jamieson, R. W.: Errors in the Diagnosis and Treatment of Adenomatous Polyps of the Rectum and Colon, S. Clin. North America (Feb.) 1958, pp. 267.
4. Pontius, G. V., Witkowski, L. J. & Anderson, R.: The Do's and Don'ts of Anorectal Surgery, S. Clin. North America (Feb.) 1958, pp. 281.
5. Allen, A. W. & Donaldson, G. A.: Carcinoma of the Colon, Am. J. Gastroenterol. 30:287 (Sept.) 1958.
6. Rider, J. A., Kirsner, J. B., Moeller, H. C. & Palmer, W. L.: Polyps of the Colon and Rectum, J. A. M. A. 170:633, 1959.
7. Rosensweig, J. & Horwitz, Alec.: Adenomatous Tumors of the Colon and Rectum. The Importance of Early Detection and Treatment, Am. Surgeon 24:515 (July) 1958.
8. Bachman, A. L.: Problems in the Roentgenologic Examination of the Colon, S. Clin. North America (Oct.) 1955, pp. 1229.

Life of the Bee

A result of medical progress in this century, according to Health Information Foundation, and an important one, has been a significant increase in the working-life expectancy of the average American. Thus, since the turn of the century, life expectancy for males at birth has risen from 47.9 years to 66.4 years in 1958, adding many happy hours not only for gainful occupation but also for additional education and retirement. A baby boy born in 1958 could anticipate a working-life expectancy of 42.3 years, and little girls could look forward to 19.9 years on the labor force, an increase from an average of 6.9 years at birth in 1900-1902.

These added work years, the report continues, are a "dramatic result of better and wiser use of medical care," with the opportunity remaining for still further improvement as the public eagerly takes advantage of increasing skills in health promotion.

The picture nevertheless remains a confusing one. More and more machines are replacing more and more workers; even in good times the nation finds itself maintaining a relatively permanent reservoir of those who are unemployed though employable; many workers, it is said, prefer unemployment benefits to the joys of employment; work hours are being shortened and retirement ages lowered, strikes and threats of strikes are prevalent, and some of the demands of some of the labor leaders, are, to put it mildly, arrogant.

It is difficult to find any particular advantage in a longer working life if it is not or cannot be used for working; perhaps it should be called simply a longer leisure life, and serious attempts made to invent ways of allowing it to fade into oblivion with the least tedium. Everyone cannot sit under a cork tree, like Ferdinand the bull, for years on end; there are not enough cork trees, especially in America the Beautiful.—The New England Journal of Medicine.

The West Virginia Statewide Rheumatic Fever Prophylaxis Program to Prevent Recurrences Of Rheumatic Fever: Methods and Results

(September 1952-July 1, 1960)

Richard Rashid, B. S.

THE devastating effect of rheumatic fever on the valves of the heart has been known to the medical profession for many years, yet complete understanding of the etiology and pathogenesis of the disease still is lacking. Ultimate control of rheumatic fever depends on more basic knowledge, but until such time as that is acquired we must concentrate our efforts on prevention. By proper application of our present knowledge and with effective use of preventive measures the present mortality of 19,000 in the United States should be considerably lowered.[1]

Although the occurrence of rheumatic fever has decreased from 6/100,000 in 1905 to 0.3/100,000 in 1953, the disease still affects one million U. S. citizens yearly. Also, rheumatic heart disease has been found in one to four per cent of school children and it is the cause of 98 per cent of all heart disease in persons under the age of 20.[2]

During World War II much evidence was collected indicating the development of rheumatic fever in servicemen closely following epidemics of B-hemolytic streptococci. That Group A B hemolytic streptococci are the inciting factor no longer can be denied. It has been proved that following an initial upper respiratory Group A streptococcal infection approximately 3 per cent will be afflicted, and that B hemolytic upper respiratory infection in children and young adults who have had one or more attacks of rheumatic fever causes recurrence of the disease in 40 to 50 per cent of cases.[3, 1] In a study of 1,000 children who had rheumatic fever before the era of sulfonamides and penicillin prophylaxis, Jones[4] found a recurrence rate of 20 per cent for the first five years, 10 per cent for the second five-year period, 5 per cent for the third five years, and approximately 1.5 per cent for the fourth five-year period.

The consequences of each of these recurrences is an increased amount of damage to the heart valves, but fortunately these recurrence rates have been successfully reduced by prophylaxis.

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Effect of Chemotherapy

With the advent of chemotherapy the picture changed considerably. The sulfonamides had been given widespread trial in the treatment of streptococcal sore throats. Early reports indicated that prophylactic doses of 0.5 to 1.0 Gm. sulfonamide per day would prevent outbreaks of streptococcal infection and recurrences of rheumatic fever.[5] Soon after, however, epidemics occurred in spite of sulfonamide prophylaxis. It has since been demonstrated that any therapy which does not completely eradicate streptococci from the throat is not effective in preventing rheumatic fever and recurrences, because the persistence of the streptococci is an essential factor in the development of rheumatic fever. Since sulfonamide drugs do not do this they are less often used in the treatment of streptococcic sore throat but can be used to prevent it. Also, there have been reports of some sulfonamide resistant strains of streptococci. When penicillin became available it was quickly tried in treating streptococcal infections and was found to be bactericidal for susceptible strains. In an early report on the treatment of streptococcal infections with penicillin, Dr. T. Duckett Jones suggested the feasibility of penicillin prophylaxis. Since that time numerous prophylaxis programs have been established. One of the first to report results was Jones, at the House of the Good Samaritan, in Boston. Here he found that with adequate penicillin prophylaxis the recurrence rate of rheumatic fever could be lowered ap-

proximately 85 per cent. Another one of these programs is that of West Virginia which will be discussed in this paper.

West Virginia Prophylaxis Program

In West Virginia the Penicillin Prophylaxis Program for indigent and medically indigent children and adults who have had rheumatic fever or rheumatic heart disease was inaugurated in 1952 by the West Virginia Heart Association in cooperation with the State Department of Health. A Council was set up by the Heart Association to work in conjunction with the Health Department officials and to operate the program jointly.

A program was designed to provide indigent and medically indigent rheumatic fever victims with free penicillin beginning in September, 1952. By virtue of a grant of oral Bicillin from Wyeth Laboratories, Inc., alternate patients were placed on Bicillin and penicillin. Beginning in June, 1953 and continuing until August, 1960, the Rheumatic Fever Prophylaxis Council placed all new patients on penicillin unless Bicillin was specifically requested. Patients who were taking Bicillin, however, were not changed to penicillin G so that long-term comparative study of the two drugs could be made.

Each of the agencies previously named has a definite role in the program. The Rheumatic Fever Prophylaxis Council is the administrative body in charge of the actual program. The Council sets all policies and acts on any problems which may arise. At first the Health Department financed the whole project but due to a budget cut in 1954, it was necessary for the Heart Association to assume a major portion of the drug cost. Physician education, lay education and publicity are handled largely through the Heart Association. The success of this, although far from complete, is reflected in the growth of the program. Thus the Heart Association contributes in three major ways: policies, finances and education.

The mechanical aspects are handled entirely by the State Health Department. Here applications are received, reviewed by the Council, and those patients selected are admitted to the program. The Department provides professional and secretarial help in processing applications and in keeping an up-to-date case registry. Actual shipment of penicillin to physicians using the program is a full-time job for one health department employee who also keeps a running account of the number of active patients, recurrences, count distribution and drop-outs. Another important function of the Department is that of providing public health nursing follow-up on old and new cases. Cooperation between the Heart Association and the Health Department has been excellent.

Beneficiaries and Distribution

The program is primarily for those persons, especially children, with rheumatic fever or rheumatic heart disease who cannot afford to buy the drug or those upon whom purchasing medication over a long period of time would be a severe financial burden. Since no good criteria for medical indigency have as yet been determined, each case must be considered on its own merit. Distribution is based on the following: (1) The penicillin is distributed only upon request of licensed physicians to indigent and medically indigent patients living in West Virginia. Indigency here is determined by the individual physician. (2) It is distributed to children who have had a known attack of rheumatic fever or who have rheumatic heart disease, congenital heart disease or cardiac surgery of such magnitude that the referring physician deems prophylaxis advisable. Each child is consigned to this group until he becomes of voting age. (3) It may be distributed to adults under these same general conditions if they have had a known attack of rheumatic fever within the past five years. (4) It is distributed only through those physicians who agree to keep their patients under observation at reasonable intervals in order that the West Virginia Heart Association and State Health Department may obtain such information as may be requested.

Details of Application

When these requirements are met the physician fills out an application form which contains the modified Jones Criteria as well as the usual statistical information regarding the patient and sends it to the State Health Department where it is reviewed by two physicians. If it meets the modified Jones Criteria the patient is placed on the program. If the application does not definitely establish a diagnosis of rheumatic fever, a form letter requesting more information is sent to the physician and when it is returned completed the case is again reviewed and, if approved, the patient is given a number and added to the case registry.

In the past, index cards with the patient's name, address and number and the physician's name and address, were added to the mailing list file under one specific day of the month and the drug was mailed out each month to the physician. But as of August 1, 1960, patients have been listed on a file card under their physician's name. A two months' supply of penicillin is shipped to

the physician for each of his patients and the patient must go to the office to obtain it once a month. This insures a constant monthly communication between the doctor and patient who is usually questioned or examined, or both, at this time for evidence of rheumatic activity. The physician then fills out a card which has been sent to him along with the penicillin and returns it to the Health Department. This information card informs the Health Department whether the patient is getting his medication monthly, whether he is cooperating, and indicates any recurrences. Any pertinent information on this card is then entered on the case registry. Before the next supply of penicillin is sent out, the registry is checked to see if the card has been returned for the previous month, giving further check on the continuity of prophylaxis, and if it has not been returned a special letter is sent to the doctor. Failure of the physician to return the card for three consecutive months automatically drops his patient from the active files. Fortunately, this has happened only fourteen times since the program started.

If from these files it is found that the patient is not cooperating, another letter is sent to the physician asking if he wants to keep the patient on the program. If the physician indicates he wants public health nursing follow-up, this is recorded and the public health nurse involved is notified. She, in turn, contacts both the physician and the patient to see what can be done. This aspect of the program has not been utilized as much as it should be but it is hoped that it will be in the future.

Recurrence Defined

When a recurrence is reported, a form letter is sent asking the physician to give the signs and the symptoms present at that time. For this report, recurrence has been defined as reappearance of two majors or one major and two minors of the modified Jones Criteria after a period of two months in which the patient is symptom free, or after the first two months on the program. Once a recurrence has been substantiated, it is recorded on the patient's visible card file and it is also placed on the Recurrence Roster which is prepared for the files of the West Virginia Heart Association.

Table 1

West Virginia Rheumatic Fever Prophylaxis Program Enrollment by Age and Sex

Sept. 1952 - July 1, 1960 (1,832 Cases)

Age	*Male*	*Female*	*Total*
Under 10	353	355	708
10 - 19	407	493	900
20 - 29	35	75	110
30 - 39	20	35	55
40 - 49	13	27	40
50 - 59	6	7	13
Over 60	0	2	2
No age given	1	3	4
Total	835	997	1,832

Children under 20 — 87.8%
Adults over 20 — 12.2%
Males — 45.6%
Females — 54.4%

Results of West Virginia's Program

While many difficulties have been encountered, results of the Rheumatic Fever Prophylaxis Program of West Virginia are gratifying. As of July 1, 1960, there had been 1,832 persons admitted to the program, of which 64, or 3.49 per cent, were congenital heart cases (Table 1). Approximately 550 doctors had taken advantage of the program and 370 were active in it at that time. Of the 1,832 patients admitted, 1,118 were currently active. Thus, there was a discontinuance rate of 38.97 per cent as compared with a 41.1 per cent delinquency of patients participating in

Table 2

Reasons Given for Discontinuation of Medication

A.

	Penicillin	*Number*	*Per Cent*
1)	Patient uncooperative	241	39.97
2)	Patient moved	119	19.73
3)	M. D. uncooperative	13	2.16
*4)	M. D. request	147	24.38
5)	Patient now buys own	17	2.82
6)	Changed diagnosis	17	2.82
7)	Patient died	32	5.30
8)	Status unknown	17	2.82
	Total	603	100.00

**M. D. Request Discontinuation of Rx. with Penicillin*

a)	Patient sensitive	20
b)	Patient no longer needed prophylaxis	47
c)	Patient in hospital	7
d)	M. D.'s orders *per se*	73
	Total	147

B.

	Bicillin	*Number*	*Per Cent*
1)	Patient uncooperative	51	45.95
2)	Patient moved	20	18.02
3)	M. D. uncooperative	5	4.50
*4)	M. D.'s request	15	13.51
5)	Patient now buys own	2	1.80
6)	Changed diagnosis	2	1.80
7)	Patient died	6	5.41
8)	Status unknown	10	9.01
	Total	111	100.00

**M. D. Request Discontinuation of Rx. with Bicillin*

a)	Patient sensitive	0
b)	Patient no longer needed Rx.	10
c)	Patient in hospital	1
d)	M. D.'s orders *per se*	4
	Total	15

Total number of patients	1832
Total number to discontinue	714
Per cent of total to discontinue	38.97%

the Connecticut Program over a three-year period.[6]

Discontinuance Rate

The various reasons for discontinuing prophylaxis are given in Table 2. Of the 714 which were discontinued, 292 or 40.89 per cent were dropped from the program because of lack of cooperation on the "patient's" part. Since 1,608 or 87.8 per cent of the prophylaxis patients are under 20, and of these 708 or 38.65 per cent are under 10 years of age, we are in agreement with Bywaters that either parental apathy or ignorance is a major factor here and we feel that with better patient-parent education this number could be significantly decreased.[7] It is felt that here the public health nursing follow-up program could be a decisive factor. Therefore, a new system has just been initiated whereby each new patient will automatically be followed up by the public health nurse unless the physician specifically requests that such not be done. Note that in Table 2, parts A and B, there is a breakdown of reasons for those discontinuances listed under doctor's request. In Table 3 one may find the length of time that patients were on treatment before discontinuance. (Note that 54.32 per cent of the entire 1,832 were on the program for one year or less).

Table 3

Time Patient Was on Program Before Discontinuing In Years and by Medication

	Penicillin	*Bicillin*	*Total*	*Per Cent*
½ Year	362	42	404	22.03
½ - 1 Year	557	35	592	32.29
2 Years	343	19	362	19.75
3 Years	226	21	247	13.43
4 Years	85	13	98	4.26
5 Years	56	21	77	4.20
6 Years	19	12	31	1.75
7 Years	9	13	22	1.25
8 Years	1	0	1	0.05
Total	1,658	176	1,834	
Still on Rx.	1,052	65	1,117	
Disc. Rx.	606	111	717	
Patient months on Rx.	34,884	5,724	40,608	

Incidence and Age

Of the 1,832 cases reviewed it was found that 67.92 per cent of those admitted were in the 5-14 age group, the largest one group being the 10-14 group of 34.65 per cent (Table 4). In this same table note the incidence in the 0-4 age group. Since congenitals were also included there, the actual rheumatic fever occurrence is 4.09 per cent which is still slightly high for this age range.

Recurrences Per Patient Months

Active patients on penicillin prophylaxis had a total of 40,608 months on treatment with 120 accepted recurrences which had been proven. This means one recurrence every 338 patient months on penicillin. There had been 176 patients on Bicillin with a total of 5,724 patient months and 15 recurrences which had been proven. The patients on Bicillin had one recurrence for every 382 months on treatment. This would seem to indicate that Bicillin is a more effective prophylaxis than penicillin but caution is the rule regarding conclusions made, due to the uncontrolled elements of the program, e. g., the inability to ascertain if the patient has been faithful in his treatment.

Since the primary purpose of the prophylaxis program is to prevent recurrences of rheumatic fever, much effort has been expended to review carefully each reported recurrence from the onset of the program in 1952 to July 1960. A recurrence was accepted as such only if the patient met the modified Jones Criteria and had been on the program at least 2 months or had had 2 symptom free months prior to the reported recurrence.

Table 4

Age on Admission to Rheumatic Fever Prophylaxis

	Penicillin	Bicillin	Total	Combined Actives	Per Cent	Congenital Heart and Post-Cardiac Surgery Patients
0- 4 Yrs.	89	9	*98	60	*5.35	*23
5- 9 Yrs.	558	53	611	397	33.34	23
10-14 Yrs.	561	76	637	388	34.65	12
15-19 Yrs.	241	23	264	148	14.40	4
20-24 Yrs.	62	4	66	34	3.60	1
Over 25 Yrs.	146	10	156	93	8.51	1
Total	1,657	175	1,832	1,120	100.02	64

*Minus the congenitals, the 0-4 group has a 4.09% occurrence.

Accepted Recurrences

Up to July 1, 1960, of the 204 recurrences reported, 135 were accepted recurrences, 32 were found not to be recurrences and many of the 32 were errors in reporting. Twenty-six were questionable recurrences and 11 could not be determined due to inability to get further information to substantiate the diagnosis. Once a reported recurrence has been verified, the problem becomes one of determining whether this is a true breakthrough in treatment or whether the patient has been lax in his prophylaxis prior to the recurrent attack. Of the 135 accepted recurrences, 35 of the patients were known to be outright uncooperative and lax or delinquent in their treatment and therefore cannot be considered true

break-throughs. There also are patients who probably have not told their physician about a break in prophylaxis. One cannot be sure, therefore, that any of these are true break-throughs, but we must assume that those which the physicians reported cooperative were not delinquent in their treatment.

Rate of Recurrence

Of the 1,592 patients on penicillin prophylaxis, 102 were reported as having a total of 120 recurrences, i. e., a recurrence rate of .075 as compared with approximately 1.29 recurrences per patient before prophylaxis. These penicillin patients have been on the program 40,608 total months, or a ratio of one recurrence to every 338 months of prophylaxis. Sixty-eight and three tenths (68.3) per cent of the recurrent attacks occurred in patients who had been on penicillin treatment one year or less.

Of the 176 Bicillin prophylaxis patients 12 had a total of 15 recurrences, i. e., a recurrence rate of .085 as compared with approximately 1.26 recurrences per patient before prophylaxis. Forty-six and six tenths (46.6) per cent of those Bicillin patients having recurrences had theirs within the first year of treatment.

Of those 114 patients experiencing recurrences, thirty-two, or 26.7 per cent of the penicillin patients and 4, or 26.7 per cent of the Bicillin patients had their first recurrence while on the program (Table 5).

Of the 114 patients having recurrences, 85, or 74.6 per cent, were in the 5-14 age group with over half of these, i. e., 44, or 38.6 per cent, being in the 5-9 range where one would expect the greatest number of persons to become victims of recurrence (Table 6).

Problems

The problems of the prophylaxis program are many and begin with the basic step, that of the adequate diagnosis of rheumatic fever and recurrences especially in children under six and adults over twenty-five. The diagnosis should be based on the modified Jones Criteria; in actuality, however, this is not always the case because not all pertinent tests have been reported. One aid in this diagnostic problem has been the establishment of cardiac clinics in strategic locations

Table 5

Time From Beginning of Program	Number Treated		No. having first Post-Rx *Recurrence In This Period		No. having 2nd Post Rx *Recurrence In This Period		No. having more than 2 Post-Rx *Recurrences In This Period		Total *Recurrences In This Period		Per Cent of Total Recurrences	
	*Penc.	Bic.	Penc.	Bic.	Penc.	Bic.	Penc.	Bic.	Penc.	Bic.	Penc.	Bic.
2- 6 months	1,658	176	42	2					42	2	35.0	13.3
7-12 months	1,296	134	36	4	4	1			40	5	33.3	33.3
1-2 Years	739	99	22	5	3				25	5	20.8	33.3
2-3 Years	396	80	5	2			2		7	2	5.8	13.3
3-4 Years	170	59	2	..	1		..		3	..	2.5	...
4-5 Years	85	46	..	..	1	1	..		1	1	.8	6.6
5-6 Years	29	25	..	..			1		1	..	.8	...
6-7 Years	10	13	..	..			..	..	..	..	...	...
7-8 Years	1	0	..	..			..	..	..	..	...	...

*Refers to accepted recurrences only.
The column "Number Treated," includes congenitals.

Table 6

Patients With Accepted Recurrences By Age, and Race, and Medication

	PENICILLIN					BICILLIN				
Age Group	*Number of Pts. Involved*	*Sex*		*Race*		*Number of Pts. Involved*	*Sex*		*Race*	
		M.	*F.*	*W.*	*C.*		*M.*	*F.*	*W.*	*C.*
0- 4	4	2	2	4	..	1	0	1	1	0
5- 9	40	20	20	38	2	4	4	0	4	0
10-14	35	10	25	34	1	6	3	3	5	1
15-19	12	2	10	11	1	1	0	1	1	0
20-24	2	2	..	2	..		..	..	..	..
25-30	1	..	1	1	..	..	..	..	..	..
30 plus	8	2	6	8	..		..	..	..	..
Total	102	38	64	99	4	12	7	5	11	1

throughout West Virginia. These clinics have added many patients to our program.

The problem of patient delinquency also is great and it is felt that periodical and adequate education of the patient and parents by physicians, the Heart Association and public health nurses is necessary for its amelioration.

This brings up another problem, that of getting more physicians to participate and to take time to stress to the patient and parents the importance of prophylaxis and the consequence of treatment delinquency. The Heart Association is a prominent factor in the adequate physician education in this field.

Then comes the problem of limited money which limits the program in West Virginia, thereby excluding many persons, i. e., older rheumatics, especially those who are constantly exposed to young, school-age children. Some prophylaxis programs, such as that of Connecticut, supply the drugs to all rheumatics at the same nominal fee. The ideal situation would be an accurate statewide rheumatic fever and rheumatic heart disease registry and some form of prophylaxis for all patients when indicated. The Rheumatic Fever Prophylaxis Council looks forward to the time when such a program might be inaugurated.

A problem of the program which has affected this report is the difficulty of communication between the physician and the Health Department. Often the form letters are filled out by office personnel and mistakes may occur. For this reason a policy of immediate follow-up on each recurrence as it is reported rather than waiting for an annual review, was initiated in the summer of 1959.

Another perplexing problem is that of the dosage to be given prophylactically. At the beginning of the program, e. g., September, 1952 to February, 1956, the treatment dose was 100,000 units t. i. d.; from March, 1956 until April, 1957, it was 250,000 units once a day and from May, 1957 up to the present the recommended dosage is 250,000 units b. i. d. for penicillin and 200,000 units b. i. d. for Bicillin. Which gives the best protection? The Committee on Prevention of Rheumatic Fever of the American Heart Association recommends "200,000 to 250,000 units once or twice a day. Twice daily is probably more effective."[8] But as of now more definitive information is lacking. The dosage problem has been one of great interest in other programs too, e. g., that of Connecticut.[9]

Summary

A six-year review and evaluation of the West Virginia Rheumatic Fever Prophylaxis Program was conducted during the summer of 1960.

The growth of the program, although slow in the beginning, had more than doubled in the preceding three years. One thousand eight hundred seventy-eight (1,878) patients had been admitted to the program since its beginning in September, 1952. All of these, except 64 congenital heart and post-cardiac surgical patients, entered the program under the Modified Jones Criteria for Diagnosis of Rheumatic Fever.

Table 7

Summary of Rheumatic Fever Prophylaxis Program Growth From 1958 Through July 1, 1960

	1958	*1959*	*As of July 1, 1960*
Active on rheumatic fever program	774	1,009	1,120
Total No. of new patients added during year	408	508	191
Total No. to discontinue during year	172	272	101
Approximate No. of shipments made	8,506	11,110	4,198

Approximately one-third of all physicians in the state participated in the program. Even with such gratifying results there still is room for growth.

A high discontinuance rate of 38.97 per cent points out that parent-patient apathy or ignorance plays a great role in this tragedy. It is felt that better parent-patient education can increase patient cooperation and decrease the high discontinuance rate. Such education is now being carried out by physicians, public health nurses, and the Heart Association.

Patients receiving prophylaxis had a significantly lower recurrence rate than they had before prophylaxis was initiated. This is reason enough for every rheumatic to be on prophylaxis.

More than sixty-seven per cent (67.92 per cent) of the patients admitted were in the 5-14 age group, as one would expect, but there were 4.09 per cent in the 0-4 age range which is too high an occurrence rate for such ages. This indicates the need for better and more accurate diagnosis of rheumatic fever using the Modified Jones Criteria and doing all pertinent tests required, especially in children under six and adults over twenty-five.

The mailing system for the penicillin has been changed so that each physician now receives a two-months' supply per patient in one large shipment. It is felt that this arrangement will be more convenient for the doctor and will cut expenses of the program considerably.

Members of the Rheumatic Fever Prophylaxis Council:

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References

1. Zukel, W. J.: Prevention of Secondary Attacks of Rheumatic Fever, Public Health Reports 72, No. 10, (Oct.) 1957.
2. Committee of the American Rheumatism Association, Primer on the Rheumatic Diseases, Part I, 171:1205.
3. Massell, B. F. & others: Prevention of Rheumatic Fever by Prompt Penicillin Therapy of Hemolytic Streptococcal Respiratory Infections. Progress Report. J. A. M. A. 146:1469, 1951.
4. Bland, I. F. & Jones, I. D.: Rheumatic Fever and Rheumatic Heart Disease: A Twenty Year Report on 1,000 Patients Followed Since Childhood, Circulation 4:836, 1951.
5. Milzer, et al.: Oral Prophylaxis of Rheumatic Fever With Penicillin, J. A. M. A. 136:536-538, 1948.
6. Connecticut Heart Association: Operation of a Cooperative State-Wide Rheumatic Fever Prevention Program, 1959.
7. Bywaters, et al.: Prevention of Rheumatic Fever, Brit. M. J. (May) 1957, p. 1234.
8. American Heart Association: Prevention of Rheumatic Fever and Bacterial Endocarditis Through Control of Streptococcal Infections. Revised, 1960.
9. Connecticut Heart Association: Rheumatic Fever Secondary Prevention Program, 1958.

Medicine's Concern for the Aged

It takes a bit of doing these days to separate the wheat from the chaff in this broad question of medical care and medical care costs, particularly as they apply to the aged. In the full bloom of this newly-found issue of the politicians, too many persons lose sight of the simple fact that the history of medicine in America is one in which the doctors of this country have been taking care of people. For many, many years, the medical profession has been in the forefront of those who have felt that every man, every woman, every child in America should have the finest medical care when needed.

Medicine's concern for the elderly has always existed. It did not start with doctors—as it has with certain people in the political arena—just a few years ago. This recent concern by some with political motives and ideas coincides strangely with the fact that they now represent 16-million votes. Incidentally, the doctors have considerable responsibility for those 16-million votes; we're very proud of them. We know that since the turn of the century we've added 20 years in average life expectancy in this country.

Moreover, we in the profession feel that the government does have a responsibility to help people who cannot help themselves. This is the reason we have supported the Kerr-Mills law, which states that those people who need help should have help.

I am unalterably opposed to the social security approach. First, because it is an approach that benefits the rich as well as the poor. Second, because it is a poor man's tax. Forty percent of the nation's income of $4,000 to $5,000 a year pays disproportionately into the fund. Third, I feel strongly that this is socialized medicine for the growing segment of our population over 65.

Note that every bill that has been introduced lays down provisions that services shall be provided by those hospitals and those individuals under contract with the federal government under rules and regulations prescribed by the federal government. This to me is socialized medicine for the doctors—and if we have it for the doctors, we shall soon have socialized medicine for the patients.—Edward R. Annis, M. D., in Journal, Michigan State Medical Society.

The West Virginia Statewide Rheumatic Fever Prophylaxis Program to Prevent Recurrences Of Rheumatic Fever

(July 1, 1960-June 30, 1961)

Frederick H. Dobbs, II, B. S.

THIS summary reviews the activities of the West Virginia Rheumatic Fever Prophylaxis Program for the period from July 1, 1960 to June 30, 1961, and evaluates several facets of the program not covered in the previous survey. Tables 1 through 7 are up-to-date revisions of previous tabulations, while Tables 8 through 10 contain material covered for the first time this year.

Program's Growth

As Table 8 shows, the most striking trend since June, 1960 has been the program's rapid growth. The number of new patients accepted for prophylaxis has increased 29.84 per cent while the number of patients discontinued has decreased 3.79 per cent since the time of the last review. This gives an overall program growth of 33.63 per cent, and means that almost one-third of the new patients have been added in the past year. The number of congenital and surgical patients taking advantage of the program also has sharply risen, but the 65.62 per cent increase still is only 4.40 per cent of the total number of cases. As can be clearly seen, the increase in the number of patients has far exceeded expectations and probably will lead to problems in obtaining and supplying the drugs much sooner than anticipated.

Reasons for Growth

Several reasons account for the rapid inflation of the program within the past year. High unemployment, particularly in the mining communities, accounts for much of the increase. Another valid reason, and perhaps the most important, is the increased awareness and education of physicians and local health departments all over the state as to the nature and purpose of the prophylaxis program. As shown in Table 10 the number of new physicians participating in the program in the past year was 83, as compared with 57 the previous year, with a similar increase in the number of patients enrolled by these physicians.

Submitted to the Publication Committee, September 29, 1961.

The Author

- **Frederick H. Dobbs, II., B. S., of Charleston, W. Va., a third-year student at the West Virginia University School of Medicine in Morgantown.**

So there has not been a significant increase in the number of patients added per physician. In spite of this impressive indication of awareness, the bulk of patients submitted in the past year

West Virginia Rheumatic Fever Prophylaxis Program Enrollment by Age and Sex

July, 1960 - July, 1961

Age	*Male*	*Female*	*Total*
Under 10	78	78	156
10 - 19	137	147	284
20 - 29	9	29	38
30 - 39	8	15	23
40 - 49	6	12	18
50 - 59	1	0	1
Over 60	0	0	0
No age given	2	5	7
Total	241	286	527

Children under 20 — 83.49%
Adults over 20 — 16.51%
Males — 45.73%
Females — 54.27%

Table 1

West Virginia Rheumatic Fever Prophylaxis Program Enrollment by Age and Sex

Sept. 1952 - July 1, 1961 (2,360 Cases)

Age	*Male*	*Female*	*Total*
Under 10	431	433	864
10 - 19	544	640	1,184
20 - 29	44	104	148
30 - 39	28	50	78
40 - 49	19	39	58
Over 60	0	2	2
No age given	4	8	12
Total	1,077	1,283	2,360

Children under 20 — 86.78%
Adults over 20 — 13.22%
Males — 45.64%
Females — 54.36%

were placed on the program by the 161 physicians who previously have had patients on state-supplied prophylactic penicillin. These doctors placed 456 patients on the program last year, a ratio of 2.8 patients to one physician as compared with 1.4 : 1 for the new physicians and, in addition, they are treating 704 rheumatic fever victims who entered the program prior to June 30, 1960. A substantial number of patients are being treated by physicians who did not submit any new patients, but the number of new physicians taking advantage of the program shows that knowledge of the work of the program is spreading through all parts of West Virginia.

Even though the number of persons being taken off prophylaxis has decreased in the past year, there was a 56 per cent increase in discontinuance in the period from January to June of 1961. This is thought to be the result of a letter sent out by the Rheumatic Fever Prophylaxis Committee in May, 1961, asking all physicians having patients on the program to re-evaluate these patients as to need and medical indigency. The increase in discontinuance shows that the letter was favorably received and focused the physicians' attention on making a thorough survey of their patients' current medical and financial status.

Seasonal Incidence of Recurrence

An attempt also was made to determine whether or not there is a seasonal incidence of rheumatic fever recurrence among those accepted recurrences which have been reported since the program's inception in 1952. The recurrences also were compared with the average reported incidence of streptococcal infections for each month over the same period of time to determine what relation, if any, exists between recurrence and incidence of streptococcal infection. As Table 9 shows, the number of recurrences of rheumatic fever is greater during the cold months than during the milder fall and summer months at a ratio of 1.64 : 1. The incidence of streptococcal infection also was found to be greater during the winter months and seemingly bears out the evidence that streptococcal infection and recurrence

Table 2

Reasons Given for Discontinuation of Medication

A.

	Penicillin	*Number*	*Per Cent*
1)	Patient uncooperative	254	31.36
2)	Patient moved	166	20.49
3)	M. D. uncooperative	13	1.61
4)	M. D. request	231	28.52
5)	Patient now buys own	64	7.90
6)	Changed diagnosis	9	1.12
7)	Patient died	45	5.55
8)	Status unknown	28	3.45
	Total	810	100.00

M. D. Request Discontinuation of Rx. with Penicillin

a)	Patient Sensitive	26
b)	Patient no longer needed prophylaxis	53
c)	Patient in hospital	6
d)	M. D.'s order *per se*	146
	Total	231

B.

	Bicillin	*Number*	*Per Cent*
1)	Patient uncooperative	50	27.87
2)	Patient moved	30	22.73
3)	M. D. uncooperative	3	2.27
4)	M. D.'s request	24	18.18
5)	Patient now buys own	2	2.27
6)	Changed diagnosis	1	0.76
7)	Patient died	9	6.82
8)	Staus unknown	12	9.09
	Total	132	100.00

M. D. Request Discontinuation of Rx. with Bicillin

a)	Patient sensitive	2
b)	Patient no longer needed prophylaxis	8
c)	Patient in hospital	2
d)	M. D.'s orders *per se*	12
	Total	24

Table 3

Time Patient Was on Program Before Discontinuing In Years and by Medication

	Penicillin	*Bicillin*	*Total*	*Per Cent*
½ Year	488	49	537	22.91
½ - 1 Year	553	77	630	26.88
2 Years	475	28	503	21.46
3 Years	320	21	341	14.55
4 Years	119	17	136	5.80
5 Years	99	11	110	4.69
6 Years	28	16	44	1.88
7 Years	14	9	23	0.98
8 Years	11	9	20	0.85
Total	2,107	237	2,344	
Still on Rx.	1,217	99	1,316	
Disc. Rx.	890	138	1,028	
Patient months on Rx.	43,915	6,819	50,734	

Table 4

Age on Admission to Rheumatic Fever Prophylaxis

	Penicillin	Bicillin	Total	Combined Actives	Per Cent	Congenital Heart and Post-Cardiac Surgery Patients
0- 4 Yrs.	112	13	125	72	5.34	28
5- 9 Yrs.	671	66	737	431	31.48	40
10-14 Yrs.	735	98	833	468	35.58	21
15-19 Yrs.	319	32	351	187	14.99	10
20-24 Yrs.	85	5	90	41	3.85	1
Over 25 Yrs.	183	22	205	114	8.76	6
Total	2,105	236	2,341	1,313	100.00	106

Minus the congenitals, the 0-4 group has a 4.12% occurrence.

Total number of patients	2,344
Total number to discontinue	1,028
Per cent of total to discontinue	43.86%
Increase in per cent of total to discontinue over last year	4.89%

have a seasonal incidence and are more frequent during the winter months. The number of recurrences per streptococcal infection, however, is greatest during the summer months of June, July and August when the incidence of streptococcal infection is lowest. This could make one think that either the streptococcal infections are more virulent in the hot summer months, or that the patients are more inclined to be lax in their prophylaxis at a time when they are not normally bothered with colds or other upper respiratory tract infections. The fact that only a small percentage of total streptococcal infections in the state is reported also influences these results, so they should not be regarded as significant until a greater number of recurrences have been recorded, establishing a definite trend either toward or away from seasonal incidence. It might be pointed out again though that most investigators favor seasonal incidence.

Recurrence Rates

Of the facets of the program adequately covered in the previous review, only those which have changed significantly or have developed since the review will be elaborated upon at this time. As of June, 1961, 2,107 patients have been treated with penicillin prophylaxis and 132 of these have had 161 accepted recurrences. This is a recurrence rate of .076 which is practically the same as that of one year ago, showing that in this respect continual penicillin therapy is just as effective as it has been in the past. This represents, however, a total of 43,915 patient months on treatment with a ratio of one recurrence to every 273 months on prophylaxis, as compared with one recurrence to every 338 patient months on treatment as of last year. This still is not significant, considering the total number of months involved, but the trend should be closely watched for any indication of decreased sensitivity of beta hemolytic streptococci to penicillin.

There have been no recurrences recorded among those 237 patients on Bicillin prophylaxis since the last survey, meaning a decrease in recurrence rate to .059 as compared with .085 recorded last year. Also, the patients on Bicillin had one recurrence to every 487 patient months on treatment as compared with every 382 months

Table 5

Time From Beginning of Program	Number Treated		No. having first Post-Rx Recurrence In This Period		No. having 2nd Post-Rx Recurrence In This Period		No. having more than 2 Post-Rx Recurrences In This Period		Total Recurrences In This Period		Per Cent of Total Recurrences	
	Penc.	Bic.	Penc.	Bic.	Penc.	Bic.	Penc.	Bic.	Penc.	Bic.	Penc.	Bic.
2- 6 months	2,107	237	53	4	1	.			54	4	33.54	28.57
7-12 months	1,619	188	34	4	9	1	2		45	5	27.95	35.71
1-2 Years	1,066	111	21	2	7	1	2		30	3	18.63	21.43
2-3 Years	591	83	12	1	2		.	..	24	1	14.91	7.14
3-4 Years	271	62	2	..	2	.		..	4	.	2.48	...
4-5 Years	152	45	..	1	.		1	..	1	1	0.62	7.14
5-6 Years	53	34		..	1		1	..	2	..	1.24	....
6-7 Years	25	18	1	..					1	.	0.62	.
7-8 Years	11	9		..				..		.	..	...

Refers to accepted recurrences only.
The column "Number Treated," includes congenitals.

Table 6

Patients With Accepted Recurrences By Age, and Race, and Medication

	PENICILLIN					BICILLIN				
Age Group	*Number of Pts. Involved*	*Sex*		*Race*		*Number of Pts. Involved*	*Sex*		*Race*	
		M.	*F.*	*W.*	*C.*		*M.*	*F.*	*W.*	*C.*
0- 4	5	3	2	5	0	1	0	1	1	0
5- 9	47	23	24	45	2	5	5	0	5	0
10-14	46	14	32	45	1	5	2	3	4	1
15-19	16	5	11	16	0	0	0	0	0	0
20-24	4	2	2	4	0	0	0	0	0	0
25-30	3	2	1	3	0	0	0	0	0	0
30 plus	11	4	7	11	0	1	0	1	1	0
Total	132	53	79	129	3	12	7	5	11	1

as determined in June, 1960, a sizeable improvement. These results support the previous assumption that Bicillin therapy is more effective than penicillin. It must be kept in mind, however, that over half of the Bicillin patients discontinued their prophylaxis within their first year of treatment. Therefore, in addition to those reservations suggested in the previous report, these facts must be weighed before any final conclusions are drawn.

Of the 144 patients having recurrences, 103, or 71.53 per cent, were in the 5-14 age group with approximately half of these in the 5-9 age group and half in the 10-14 age group. Aside from a slight increase in the 10-14 age group, the recurrences fall approximately in the same range as those determined last year.

Concerning Discontinuance

A revision of Table 2 shows changes in several aspects in the reasons for discontinuance. Of the 942 patients discontinued, 228 were dropped from the program within the past year. Of the total, 304, or 32.27 per cent, were labeled as "uncooperative," a drop of 8.62 per cent from last year. This would seem to indicate an increased parent-patient education of the need for prophylaxis and may be due also to the practice initiated last year, that of having the public health nurse automatically follow-up each new patient unless specifically requested otherwise by the physician. In either case, the decrease in uncooperative patients is a step in the right direction. This fact is also pointed up in the revision of Table 3 which shows that 49.79 per cent of the 2,344 patients treated were discontinued within one year of the onset of treatment as compared with 54.32 per cent one year ago.

Rheumatic Fever and Age Groups

Because of the nature of the disease, the 2,344 cases of rheumatic fever reviewed as of June 30, 1961, occurred proportionately within the same age groups as the first 1,832 cases reviewed last year. More than half the cases (66.98 per cent) occurred in the 5-14 age group with the 10-14 year-old segment still the largest with 35.58 per cent. These figures are essentially the same as last year's, so this table has not varied significantly.

Summary

A review of the activities of the West Virginia Rheumatic Fever Prophylaxis Program was made for the period from July 1, 1960 to June 30, 1961. There was an overall program growth of 33.63 per cent and an increase of 65.62 per cent in the number of congenital and surgical patients. High unemployment and increased awareness of phy-

Table 7

Summary of Rheumatic Fever Prophylaxis Program Growth From 1958 Through July 1, 1961

	1958	*1959*	*1960*	*As of July 1, 1960*
Active on rheumatic fever program	774	1,009	1,207	1,381
Total No. of new patients added during year	408	508	440	332
Total No. to discontinue during year	172	272	242	158
Approximate No. of shipments made	8,506	11,110	13,636	16,100

Table 8

West Virginia Rheumatic Fever Prophylaxis Program Program Growth for the Period July 1, 1960 to June 30, 1961

New patients added July 1, 1959-June 30, 1960	449
New patients added July 1, 1960-June 30, 1961	583
Number increase	134
Per cent increase	29.84%
Number of patients to discontinue July 1, 1959-June 30, 1960	290
Number of patients to discontinue July 1, 1960-June 30, 1961	279
Number decrease in discontinuance	11
Per cent decrease in discontinuance	3.79%
Overall program growth	33.63%
Congenital and surgical patients on program June 30, 1960	64
Congenital and surgical patients on program June 30, 1961	106
Number increase	42
Per cent increase	65.62%

Table 9

West Virginia Rheumatic Fever Prophylaxis Program Accepted Recurrences by Month, Compared to Incidence of Streptococcal Infection

For Period of Sept. 1952 - June 30, 1961 (Inclusive)

	Recurrences			Average Reported Incidence of Streptococcal Infection	No. of Cases of Strep. Infections for Recurrence
	Penic.	Bic.	Total		
January	14	1	15	328	22
February	18	2	20	403	20
March	16	1	17	406	24
April	19	2	21	355	17
May	7	1	8	223	28
June	14	1	15	103	7
July	10	0	10	106	11
August	13	2	15	104	7
September	11	0	11	128	12
October	6	2	8	153	19
November	15	2	17	186	11
December	18	0	18	231	13

	Number of Patients Treated	Number of Recurrences	Recurrence Rate
Penicillin	2,107	161	.076
Bicillin	237	14	.059

sicians and local health departments as to the purpose of the program seems to account for most of the increase.

The number of new physicians and patients added by these physicians has increased 50 per cent since last year. The bulk of patients, however, is still being added by those physicians who previously have had patients on the program.

An attempt also was made to determine whether or not there has been a seasonal incidence of recurrence since the program's inception in 1952, and what relation exists between recurrence and reported incidence of streptococcal infection. It was found that the number of recurrences and the reported number of streptococcal infections were greater during the winter months. The number of recurrences per streptococcal infections, however, has been greatest during the summer months of June, July and August. Because of the many extraneous factors which influence these results, they should not be regarded as significant until a greater number of recurrences have been recorded and a definite trend established.

Table 10

West Virginia Rheumatic Fever Prophylaxis Program Increase in Number of Participating Physicians

For the Period July 1, 1960 - June 30, 1961

	Number	Patient to Physician Ratio
July 1, 1960 - June 30, 1961		
New physicians	83	
Patients added by these physicians	120	1.43
Old physicians who have added new patients	161	
New patients added by these physicians	456	2.83
Old patients being treated by these physicians	704	4.37
July 1, 1959 - June 30, 1960		
New physicians	57	
Patients added by these physicians	80	1.40
Old physicians who have not added patients in the above period	170	
Patients being treated by these physicians	387	2.28

As of June, 1961, the recurrence rate with penicillin prophylaxis was .076 which is practically the same as that of one year ago. In this respect, continual penicillin prophylaxis is just as effective as it has been in the past. The number of recurrences per patient months on prophylaxis has increased, however, so this trend should be closely watched for any indication of decreased sensitivity of beta hemolytic streptococci to penicillin. With Bicillin therapy, the recurrence rate has dropped to .059 from .085 one year ago, and the number of recurrences per patient months has decreased. These results seem to support the previous assumption that Bicillin therapy is more effective than penicillin, but with the same reservations.

The number of patients discontinued as being "uncooperative" has decreased 8.62 per cent from last year. Also, the number of patients discontinued within their first year of prophylaxis has decreased. This would seem to indicate increased parent-patient education of the need for prophylaxis and may be due also to the practice initiated last year of having the public health nurse automatically follow-up each new patient unless specifically requested by the physician that this not be done.

Due to the nature of the disease, the present review is comparable with the work undertaken last year in all other aspects.

Members of the Rheumatic Fever Prophylaxis Council:

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. . . the brighter you are, the more you have to learn.

Don Herold.

Prescription Prices

PRESCRIPTION prices, says the Bureau of Labor Statistics of the U. S. Department of Labor, are moving down. In a report published recently, the Bureau showed that prices for prescriptions were continuing their downward trend which began last June. This may surprise those who, thanks to the Kefauver hearings, think prescription prices move only in one direction—up.

It is true, of course, that the long-term trend of prescription prices has been upward. Drugs cost more than they used to. So does nearly everything. Drug prices have gone up along with all others, and like any other medical expense they hit us on a tender nerve. It is bad enough to be sick, without having to pay the inevitable bills. But the Consumer Price Index of the Bureau of Labor Statistics shows that from 1949 through 1959 drug prices have risen about half as much as total medical care costs and slightly less than the cost of living as a whole.

What is the price of the average prescription? A survey published in the April 3, 1961, issue of *American Druggist* showed that in 1960 the prices most frequently charged for prescriptions were $1.25, $1.50, and $2.00. At the opposite extreme, prescriptions costing $10.00 or more made up only 1.5 per cent of all prescriptions sold. The average prescription price was $3.25. These statistics hardly seem to support the frequent and well publicized criticism that prescription prices have risen to unreasonable heights.

Confusion sometimes results from failure to distinguish between prescription prices and prescription expenditures. The average American in 1959 spent nearly three times as much for prescriptions as he did in 1949. But this does not mean prescription prices were three times as high in 1959 as they were a decade earlier. Statistics published by *American Druggist* explain this. Americans simply were buying more drugs in 1959. Since 1949 the average number of prescriptions filled per person rose from about 2 to more than 3.5.

One reason people are buying more prescription drugs is that today many potent new drugs are available to treat illnesses that ten years ago could not be effectively treated at all. It is hardly surprising, for example, that more tranquilizers were sold in 1960 than in 1950; in 1950 these drugs didn't exist. Today's potent new medicines often lower the cost of being ill. In the past, people who contracted pneumonia had to spend several weeks in the hospital, plus weeks of convalescence, at a cost of at least $300 to $400. Today, pneumonia can often be cured at home in a short time with less than $20 worth of antibiotics.

At one time, mastoiditis often involved surgery and cost the patient or his family around $1,000. Today there is usually no surgery. Instead, the infection is treated with drugs costing around $15, and classical cases of mastoiditis have become so rare that medical schools have difficulty in locating enough for teaching purposes. Moreover, while the nation's total outlay for drugs has gone up, purchasers' incomes have risen too.

Even though they are buying a large number of prescription drugs, people are spending only a slightly larger amount of their income for them. In 1949, out of every dollar which Americans earned, three-tenths of a cent went for prescriptions. Today we are spending six-tenths of a cent. (Compare this amount with the two cents spent for tobacco products and the three cents spent for alcoholic beverages). The slight increase in drug expenditures certainly does not seem unreasonable when one considers that each of us now purchases nearly twice as many prescription drugs, most of which are far more effective than those available ten years ago.

If drug prices had risen as much as other prices since 1949, the nation's annual bill for drugs would be approximately two hundred million dollars higher than it is.—Journal, Medical Association of Alabama.

The President's Page

What Of Our Image?

For some time now we have been told there has been a change in the "doctor image." Articles in ever increasing numbers chide us for a negative approach to all social legislation. It is said we are cold and impersonal in our physician-patient relationship. We are blamed for the high cost of medical care and are reproached for the actions of the few unethical physicians in our midst. If these allegations are true we have indeed fallen from the pedestal which the medical profession is once said to have occupied. But is this really public opinion based on fact or is this propaganda introduced to further the schemes of those who would see us socialized.

Basically, there is little wrong with the way in which we practice medicine today but untruths repeated often enough can sway the thinking of any population. Public opinion, whether right or wrong, is a powerful force. At my high school commencement I delivered an oration entitled "Public Opinion." Although copies of this address have long since disappeared, many of the thoughts expressed at that time I hold today. One was that silence infers assent. Another, that a true account of any situation must be told repeatedly in a simple logical manner, if criticism or deliberate falsehoods are to be effectively silenced.

Most doctors practicing today were indoctrinated in medical school and in early practice with a reticence toward seeking public acclaim. Physicians believed that if they did a good job people would ultimately find it out. Those who advertised their medical proficiency were viewed with disdain by their fellow physicians, or chastised by the board of censors of their county society. These ethical concepts regarding advertising were conceived for the protection of the public against charlatans and "quacks."

It may still seem unpleasant to many doctors to tell their story to the community but I am sure silence is not the method with which to counter the adverse publicity we are now receiving. Every physician must speak up in defense of the system of practice which he knows to be best. At the same time he must work to keep it so. He can promote his point of view in the name of organized medicine, not selfishly, but in the public interest.

The medical profession is an old profession. It has had considerable experience. The goal of all physicians still continues to be the best medical care for the patient. Organized medicine has opposed many social and political experiments which it believed to be not in the best interests of the patient, just as it has refrained from scientific experiments which carry an undue risk of human life. It has shied away from theories which may not work and from which there would be no easy retreat, but the medical profession has not remained aloof from these problems as they have become clarified and defined.

If we are to improve our image we must repeat our story at every opportunity. We must correct any justifiable grievances promptly and impartially. We must enter into citizenship activities in our communities. If we disagree with political policies we should make it known. We must get out of our scientific cocoon and into the community because the future of American medicine hinges upon the opinions the public holds about our medical care system and about ourselves as physicians.

I would like to extend to you season's greetings at this time and may the New Year see us with united forces working for the common good of humanity.

D. E. Greeneltch, M. D., President

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EDITORIALS

SCHOOLS SUPPLYING LARGEST NUMBER OF FIRST-YEAR MEDICAL STUDENTS

Studies made at the Central Office of the Association of American Medical Colleges show that a relatively small number of colleges and universities supply the majority of students admitted to United States medical schools each year. Material has been released giving the names of the 25 undergraduate institutions that supplied the largest number of entering first-year medical students in 1952, 1954, 1956, 1958 and 1960, and the number of students who came from each of these schools.

The following were among the top 25 schools in all five years: Harvard, University of Michigan, Columbia University, Emory University, University of Indiana, New York University, University of Minnesota, University of Illinois, Yale, Stanford, Princeton, University of Pennsylvania, University of California, (at San Francisco), University of Wisconsin, University of Texas, Cornell University, and Ohio State University.

Space does not permit the listing of all the 25 schools and the numbers of entering first-year students which they produced for the five years mentioned previously. Only the first ten will be given for the year 1960; they are: Harvard, 164; University of Michigan, 145; University of Illinois, 135; Columbia University, 131; Princeton, 120; Cornell, 96; University of Wisconsin, 93; University of Indiana, 91; and Dartmouth, 91.

Probably no special inference should be drawn from these data. A few comments, however, are in order. Some of the institutions listed have extremely large enrollments, such as, the University of California, University of Minnesota, University of Michigan, the University of Wisconsin and others. On the other hand, some, especially the so-called Ivy League schools (Harvard, Yale, Princeton, and Dartmouth) have relatively small undergraduate enrollments.

The figures would probably be more meaningful if ratios were given, that is, the actual percentage of students from given institutions entering the first year of medicine.

These data should not be interpreted to mean that premedical students from these 25 schools have a far better chance of gaining admission into medical schools than students from schools not mentioned. The fact is that there are many excellent small colleges which give splendid training in premedical courses; indeed, there are some in West Virginia.

When sickness comes, some concern is rightfully and often necessarily felt about the cost of medical and hospital care. But there is one question even more pressing than that. This is the question of finding doctors, nurses, and hospitals to give the needed care. It wouldn't do a man any good even if he had a million dollars and couldn't find a doctor to take care of him in his serious illness.

MORE IMPORTANT THAN THE BILL

This simple truth is all too often overlooked or ignored in discussions about various kinds of government medical care programs. These discussions generally proceed entirely too much on the assumption that, if there's money to pay for it, medical care will always be available.

It doesn't make too much difference, as we see it, whether you use the phrase "socialized medicine" or not. The fact to be weighed more carefully is that the more the Federal Government gets into the business of providing medical care the more certainly will the results be precisely the results of "socialized medicine" in other countries.

And one of the most dismaying of those results is that the more medicine becomes "socialized" the less attractive is it for young people to go through the long and expensive training required for high quality service as medical practitioners.

It may be taken for granted, we suppose, that doctors now in practice will continue to practice their profession under any degree of "socialization" that may occur during their active lives.

But what about the doctors of the future? Will a sufficient number of young men and women be attracted to the medical profession if its practice comes under some measure of "socialization"? And if they are attracted to the profession, will they prepare themselves with the same thoroughness and dedication that now prevail?

All documented experience elsewhere indicates that only negative answers can be found to such questions.

And, indeed, we do not need to go outside our own borders to find good reasons for doubting that medical care can be kept at the highest possible level under federalization. What support can we find in our own public departments, bureaus, commissions, agencies, and institutions for an assumption that when the government attempts to take over what has heretofore been a private endeavor it does anything but an inferior job?

For our part we grow a little weary of hearing the American Medical Association repeatedly criticized as being interested only selfishly in the welfare of its own members. Even if that be true, which we don't believe it is, all of us should still be enough concerned in our own well-being to give some thought to having a good doctor available when we need him. And if we do anything in this country to reduce the number of good doctors in practice, our chances of getting a good doctor for our private benefit will be correspondingly reduced.—*The Morgantown Post.*

Automobile Accidents

Each year in the United States almost 100,000 people are killed by accidental means. Of these more than 30,000 die from automobile accidents. In its 60 years of existence the automobile has been the cause of more deaths than the total that has resulted in the armed forces in all the wars America has fought since 1776. In fact automobile accidents are the leading cause of death in the armed forces themselves.

These facts are especially appalling when it is realized that accidents are the principal cause of death between ages 1 and 35. It is not until after age 35 that such things as heart disease and cancer begin to displace accidents on the list of killers. If the cancer in a 70-year-old person is cured, the patient may live another four or five years only to succumb to some other disease. However, when an 18-year-old person dies in an automobile accident, about 50 years of life have been snuffed out.

In the United States more than 5,000,000 people are injured every year by motor vehicles. The cost of these injuries, including medical and hospital expense, administrative costs, motor vehicle and property damage, and wage loss due to inability to work, is over $10,000,000,000 a year.—Richard B. Windsor, M. D., in Wisconsin Medical Journal.

SFPOGGWTR

Inglewood's (Calif.) News-Advertiser published the following letter in its April 26, 1959, issue: "The initials are: SFPOGGWTR, or the Society for the Prevention of Giving Gold Watches to Retirees. Of all the cruel and misguided gestures, this is about the worst. Of all times when a man least needs a reminder of time it is when he leaves a busy normal workaday world and has nothing but time on his hands.

It is sad enough when a man, who may still have health, ability and experience to carry on, must leave his job because he reaches a certain age. As he deteriorates in his idleness, the gold watch only serves to make him feel how useless he has become. Besides, any man who has had to arrive on the job on time year after year, already has one or more watches."—Journal, Michigan State Medical Society.

There is no limit to what can be accomplished if it doesn't matter who gets the credit.—Emerson.

GENERAL NEWS

Fall Meeting of the Council Held In Charleston on Nov. 12

The fall meeting of the Council of the West Virginia State Medical Association was held at the Daniel Boone Hotel in Charleston on November 12, 1961, with the chairman, Dr. John W. Hash of Charleston presiding.

Doctor Hash introduced the two new members of the Council, Drs. Richard W. Corbitt of Parkersburg and John E. Echols of Richwood. He also introduced the following guests at the meeting: Mrs. Vernon L. Dyer of Petersburg, President of the State Auxiliary; Mrs. A. C. Chandler of Charleston, Chairman of the Auxiliary's Committee on Legislation; and Mr. John Pompelli of Chicago, AMA Field Representative.

John Pompelli of Chicago, extreme right, a field representative of the American Medical Association, attended the Council meeting in Charleston on November 12. Others in the photo are, left to right, Dr. Harold Van Hoose of Man, Dr. S. Elizabeth McFetridge of Shepherdstown, and Dr. L. J. Pace of Princeton.

Election of Honorary Life Member

The Council elected the following physician to honorary life membership in the West Virginia State Medical Association:

Society	*Physician*	*Address*
Kanawha	James S. Skaggs	Charleston

Publication Committee Members Elected

Dr. E. Lyle Gage of Bluefield was reelected a member of the Publication Committee for the term ending December 31, 1968.

The Executive Secretary reported that Dr. William M. Sheppe of Wheeling, a member of the Publication Committee since 1940, died in a hospital in that city on October 14, 1961.

Dr. Charles L. Goodhand of Parkersburg, Vice President of the Association, was elected to fill the term of Doctor Sheppe which expires on December 31, 1966.

Report of Medical Economics Committee

Dr. James S. Klumpp of Huntington, Chairman of the Medical Economics Committee, submitted a report concerning the Medical Care for the Aged Program in West Virginia. The report folows:

Members of the Medical Economics sub-committee on MAA activities, together with the Chairman of the Medical Economics Committee, met on Thursday, November 2, 1961, with Mr. W. Bernard Smith, Director, Mr. L. L. Vincent, Assistant Director, and Mr. Calvin Cook, Supervisor of the Medical Assistance for the Aged Program of the Department of Welfare, at the State Office Building in Charleston.

A number of pertinent matters were discussed freely by all present. The reaction to each item will be related in sequence.

A. Unfinished Business

1. Request for increase from $3.00 to $3.75 for office and hospital visits. This request was made many months ago, with no action taken by the incumbent Director or his predecessor. We were informed that further study was required and no action would be taken at the present time.

2. Restoration of anesthesiology fees to the figure tentatively approved by the previous Director. Dr. Harry S. Weeks, Jr., discussed this matter thoroughly and cited a cost figure of $9.92 just to have a patient wheeled into surgery, without consideration of payment for the time and skill of the anesthesiologist. This cost figure would be less in those hospitals where salaried nurse anesthetists are employed. The Director promised a decision within ten days.

3. Complete report on MAA case load, patients treated and costs thereof for first six months of 1961. In July your Chairman was informed that flood damage to IBM equipment prevented this compilation. On November 2 we were given a meager report with but the case load, cases treated and total cost figures, together with the explanation that a present change in tabulating operations would delay a complete report. From October 6, 1960, to September 30, 1961, 29,343 applicants had been approved for participation, and 41,871 cases had been treated at a cost of $2,495,614.38. It is apparent that the figure of 41,871 cases treated is not the actual number of individuals accepted for health care, but reflects the carry over of many individual cases from month-to-month. This figure

tends to magnify the benefits received but is of no use in determining costs per patient.

4. Medical Review Boards for Public Assistance Rolls. The Director was seemingly enthused over this project in July, 1961, but on November 2, 1961, he tersely stated that no further action had been taken, and your Committee was led to infer that the project was dead.

B. Complaints

1. Reported overusage of MAA Program by the Director. The Director was concerned by the large number of patients admitted to hospitals, and to the number of days stay. He stated that 75 per cent of all funds were expended for hospital costs and 10 per cent for drugs, leaving only 15 per cent for medical care, administration and other ancillary costs. It was brought out in discussion that many physicians have submitted vouchers with a stated diagnosis which failed to describe the condition as acute. Your Chairman can verify this fact from personal review of vouchers made in July, 1961. The Director stated that lay personnel could not presume to return such faulty vouchers to physicians, and when it was suggested that a full-time physician employed by the Department of Welfare could spot these faults rapidly and efficiently, the Director remarked that it would be beneficial, but that he had not as yet decided to look for such a physician, even though it was admitted that hundreds of thousands of dollars might be saved by a more strict interpellation of medical eligibility.

2. Solicitation of MAA applicants by Department of Welfare case workers. It was readily admitted that such solicitation had occurred, but only early in the program, and only in an effort to help the medical profession develop its "pet MAA program."

3. Solicitation after admission to hospital. The Director admitted to such solicitation by personnel of two small hospitals in Central West Virginia, but questioned its occurrence in larger centers where hospital beds were in constant demand by other than MAA participants.

4. Time lag between submission of vouchers and payment. This was admitted with the statement that steps are now being taken to simplify such procedures. The Director mentioned the occurrence of certain physicians who have either crossed out the red ink service phrase in the voucher, or who failed to sign the voucher, in an alleged attempt to charge fees over and above the stated service fees. It is admitted that such a procedure would delay payment in the small number of vouchers involved.

5. Demand for right to charge additional fees over and above the stated service schedule at the discretion of the individual physician. This procedure is covered by a regulation which has the full effect of law and consideration of the request was denied by the Director.

6. Request for consideration of a new fee schedule by a specialty group in West Virginia. By majority vote of the sub-committee, the request was not presented to the Director at this time.

7. Refusal to pay general practitioners for so-called specialist services, e. g., refusal to pay a general practitioner for intra-articular cortisone injections when orthopedic service was not available. Denied. The MAA program can pay only specialists for specialist services.

Respectfully submitted,

Harry S. Weeks, Jr., M. D.
Geo. R. Callender, Jr., M. D.
James S. Klumpp, M. D.

The conclusions arrived at by the Committee are not published as a part of this report.

Operation of the MAA Program

Several of the members discussed various complaints concerning the operation of the MAA Program. It was pointed out that many physicians, together with personnel in district welfare offices, do not have a clear understanding of the program.

Following considerable discussion, the Council instructed the Chairman of the Medical Economics Committee, Dr. James S. Klumpp, to prepare a directive to be mailed to every member of the State Medical Association. He was requested to include in the letter all pertinent facts relative to the operation of the MAA Program in West Virginia. He was also asked to seek the cooperation of all physicians in making the operation of the program successful.

Doctor Hash requested the members of the Council to inform physicians in their districts that any complaints in connection with the operation of the MAA Program should be channeled through the proper committees of the Association. He stated that many physicians throughout the state are filing complaints directly with the Director of the Department of Welfare.

Heart Clinic Program

Doctor Greeneltch read a report from Dr. R. U. Drinkard of Wheeling, Chairman of a Committee appointed by the President several months ago to consult with officers of the West Virginia Heart Association concerning the present program and proposed future policies for the establishment of heart clinics throughout the state.

The Council went on record as unanimously approving the report submitted by Doctor Drinkard, and the program proposed by the Heart Association.

Pre-Medical Curriculum

Doctor Hash discussed briefly the pre-medical curriculum at West Virginia University and other institutions of higher learning in the state. He said the State Medical Association should offer assistance to members of college faculties and that individual members should agree to serve as advisors to pre-medical students when called upon by administrative officials at these institutions.

Report on National Legislation

Mr. John Pompelli of Chicago, AMA Field Representative, presented a detailed report on legislation of interest to the medical profession now pending in Congress with particular emphasis on the King-Anderson Bill (HR 4222).

He said it was of utmost importance that physicians step up their campaign to defeat this type of legislation which would place medical care for the aged under the Social Security System.

Dr. Frank J. Holroyd of Princeton, Chairman of the Legislative Committee of the State Medical Association, presented the following resolution for consideration by the Council:

WHEREAS, the proponents of H.R. 4222 (King Bill) have given a high priority to the passage of this proposal in the second session of the 87th Congress, and

WHEREAS, a dynamic and effective grassroots public education program regarding the inherent danger of this legislative proposal is vital if our free enterprise system of medical care is to be preserved, therefore be it

RESOLVED, That the Council of the West Virginia State Medical Association, recognizing the seriousness of the Administration's efforts to secure passage of H.R. 4222, urgently requests the county medical societies of the Association to give the highest priority to the organization of local committees for the purpose of combating H.R. 4222 and any similar federal legislation, and be it further

RESOLVED, That the Legislative Committee of the West Virginia State Medical Association be charged with the responsibility of supervising these activities throughout the state, and be it further

RESOLVED, That the Field Contact Program, 1961-62, be adapted to local needs and used as a guide for an effective public education program.

The Council went on record as unanimously approving the resolution and directed the Executive Secretary to send copies to the secretaries of component societies.

Budget of State Health Department

Dr. William A. Thornhill, Jr., of Charleston, appeared before the Council on invitation of the Chairman and discussed briefly the proposed budget for the State Health Department for the fiscal year, 1962-63.

He compared the budget of the State Health Department of West Virginia with those of the neighboring states. He discussed in particular how a shortage of funds has hindered the progress of the rheumatic fever prophylaxis program sponsored by the State Health Department and the West Virginia Heart Association.

Doctor Hash pointed out that it was the responsibility of the medical profession to offer assistance to the state director of health in his appeal for an increased appropriation from the Board of Public Works and the Legislature.

The Executive Secretary was directed to contact the presidents and secretaries of component societies, urging them to call upon physicians to discuss with their legislators the need for additional funds for the operation of the State Health Department.

Selection of Physicians for the Armed Forces

Dr. Ward Wylie discussed briefly the selection of physicians and other health personnel for duty with the armed forces. Doctor Wylie, who is a member of the National Advisory Committee on the Selection of Physicians, Dentists and Allied Specialists, reported on a recent meeting of that group held in Washington for the purpose of discussing the number of physicians needed in the armed forces in light of the world situation at the present time.

The following is a list of those who attended the meeting:

Dr. John W. Hash, Charleston, Chairman; Dr. D. E. Greeneltch, Wheeling, President; Dr. L. J. Pace, Princeton, President Elect; Dr. Charles L. Goodhand, Parkersburg, Vice President; Dr. Daniel N. Barber, Charleston, Treasurer; Dr. J. C. Huffman, Buckhannon, Councillor at Large; and Drs. Paul P. Warden, Grafton; Richard E. Flood, Weirton; S. Elizabeth McFetridge, Shepherdstown; J. C. Pickett, Morgantown; Richard V. Lynch, Jr., Clarksburg; John E. Echols, Richwood; Richard W. Corbitt, Parkersburg; Albert C. Esposito, Huntington; Ward Wylie, Mullens; Harold Van Hoose, Man; Theodore P. Mantz, Charleston; Clyde A. Smith, Beckley; and William H. Lively, Charleston, Secretary ex officio.

The meeting was also attended by Dr. Frank J. Holroyd, Princeton, AMA Delegate; Dr. Thomas G. Reed, Charleston, AMA Alternate; James S. Klumpp, Huntington, Parliamentarian; John Pompelli, Chicago, AMA Field Representative; Mrs. Vernon L. Dyer, Petersburg, President of the Woman's Auxiliary to the State Medical Association; Mrs. A. C. Chandler, Charleston, Chairman of the Legislative Committee of the State Auxiliary; and Drs. George F. Evans, Clarksburg, Don S. Benson, Moundsville, Robert T. Brandfass, Wheeling, and William A. Thornhill, Jr., Charleston.

Dr. Gage To Represent Association At National Conference

Dr. E. Lyle Gage of Bluefield, Chairman of the Committee on Aging of the West Virginia State Medical Association, will participate in the second National Conference of the Joint Council to Improve the Health Care of the Aged which will be held at the Edgewater Beach Hotel in Chicago, December 15-16.

The theme of the two-day meeting will be "Aging Comes of Age." The presiding officer will be Dr. Charles H. Patton of Philadelphia, President of the American Dental Association.

The purpose of the conference is to focus attention on the current social, economic and health status of the aged; to review selected medical research in aging; to present successful voluntary programs in improving health care, and to encourage continued participation and cooperation of our community health agencies in meeting the demands and needs of this growing segment of our society.

Doctor Wholey To Study in Sweden

Dr. Mark H. Wholey, radiologist of Charleston, has received a fellowship grant from the National Institutes of Health to support a one-year program of advanced study and research at the University of Lund in Lund, Sweden. The program will include research work in neuroradiology and all phases of angiography.

Dr. and Mrs. Wholey and their three children will depart for Sweden on December 8.

Dr. Martin Speaker at PG Meeting

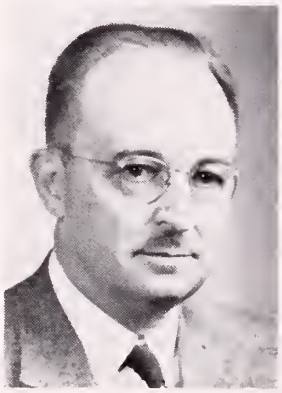
Dr. J. E. Martin, Jr., of Elkins, appeared as a speaker at a recent postgraduate meeting in Philadelphia sponsored by the American College of Chest Diseases. He participated as a member of a panel on "The Evaluation of All Disabilities in Occupational Chest Diseases."

Publication Committee Members Named by Council

Dr. E. Lyle Gage of Bluefield has been reelected by the Council as a member of the Publication Committee of the West Virginia State Medical Association for the term ending December 31, 1968.

Dr. Charles L. Goodhand of Parkersburg was also elected a member of the Committee to succeed Dr. William M. Sheppe of Wheeling, who died at a hospital in that city on October 14, 1961. Doctor Goodhand will serve the unexpired term ending December 31, 1966.

The Publication Committee is composed of a chairman, who is the Editor of *The West Virginia Medical Journal*, and six other members who serve as associate editors. The Committee is in charge of the publication of *The Journal*, which is the official organ of the West Virginia State Medical Association.



E. Lyle Gage, M. D.

Charles L. Goodhand, M. D.

Doctor Gage is a native of Whitehall, Wisconsin, and he received his M. D. degree from the University of Pennsylvania School of Medicine. He served his internship at the University of Pennsylvania Hospital and had residency training at the Royal Victoria Hospital and Montreal Urological Institute in Montreal, Canada. His specialty is neurosurgery.

He is a past president of the West Virginia State Medical Association and has served as an associate editor of *The Journal* since 1955.

Doctor Goodhand was born in Chester, Maryland, and received his M.D. degree from the University of Maryland School of Medicine. He interned and served residencies in obstetrics and gynecology at hospitals in Baltimore.

He served a term as president of the Parkersburg Academy of Medicine and has been a member of the Council of the State Medical Association since 1958. He was elected vice president of the Association during the 94th annual meeting at The Greenbrier in August.

Hospital in Elkins Receives NIH Grant

The National Institutes of Health has awarded a research grant to Memorial General Hospital in Elkins to support a study on "Epidemiology of Breathlessness in Coal Miners."

Dr. R. J. Johnson Named President Of W. Va. Cancer Society

Dr. Robert J. Johnson of Morgantown was elected president of the West Virginia Division of the American Cancer Society during the recent annual meeting of the organization which was held in Beckley.

Doctor Johnson, who is Professor and Chairman of Gross and Neurological Anatomy at the West Virginia University School of Medicine, succeeds Dr. Hu C. Myers of Philippi.

Dr. Vernon Duckwall of Elkins was named vice president and Mr. J. Ross Hunter of Charleston was reelected secretary. Mr. Max W. Saunders of Charleston was named treasurer.

Doctor Myers, Mrs. D. N. Thomas of Weirton and Dr. Bernard Zimmermann of Morgantown were named to the Executive Committee. Miss Mary K. Barnes of Charleston was named as a delegate to the American Cancer Society.

New members of the Board of Directors were elected as follows: Dr. Joel Allen and H. W. Schulz, Ph.D., both of Charleston; Dr. Jack Burnett, Wheeling; Dr. R. L. Calvert, Spencer; Mr. George Darden, Elkins; Mrs. Emma Dixon, Parkersburg; Dr. Nicholas W. Fugo, Morgantown; Dr. Sobisca S. Hall, Clarksburg; and Mrs. Gardner Pierce of Martinsburg.

Hupp E. Otto Elected President Of TB and Health Assn.

Hupp E. Otto of Wheeling was elected president of the West Virginia Tuberculosis and Health Association during the 41st annual meeting which was held in Elkins, October 11-12. Other new officers for the coming year are as follows:

Dr. John J. Lawless of Morgantown, vice president; Mrs. Robert S. Meighen of Weirton, secretary; and Mr. Robert C. Hawkins of Charleston, treasurer.

Named to the Executive Committee were Mrs. H. H. Cudden of Logan, Benjamin L. Frye of Wardensville, Mrs. Lela House of Williamstown, F. N. McCamic of Wellsburg, and Dr. Richard V. Lynch, Jr., of Clarksburg.

At the annual business meeting of the West Virginia Trudeau Society held on October 11, the members voted unanimously to change the name of the organization to the West Virginia Thoracic Society, which brings the name in line with the American Thoracic Society, of which the State Society is an affiliate. New officers elected for the coming year were:

Dr. Richard V. Lynch, Jr., Clarksburg, president; Dr. Preston C. Davis of Beckley, vice president; and Dr. Morris H. O'Dell of Charleston, secretary-treasurer.

Dr. H. S. Willis, Medical Director of the North Carolina Sanitorium System and president of the National Tuberculosis Association, attended the meeting and appeared as a speaker before several groups.

Dr. A. C. Esposito Reelected Secretary Of Southern Medical Section

Dr. Albert C. Esposito of Huntington was reelected secretary of the Section on Ophthalmology and Otolaryngology of the Southern Medical Association at the Annual Meeting in Dallas, Texas, November 5-9.

Doctor Esposito served as chairman of arrangements for the Section meeting in Dallas and will have the same responsibility at the 1962 meeting which will be held in Miami Beach, Florida. Dr. Samuel McPherson of Durham, North Carolina, is chairman of the Section.

Dr. Howard A. Swart of Charleston, Councillor from West Virginia, attended the meeting and was present at all sessions of the Council. The meeting was also attended by Dr. Walter E. Vest of Huntington, a past president of the Association.

Kentucky Physician Named President

Dr. A. Clayton McCarty of Louisville, Kentucky, was elected president of the Association for the coming year. He succeeds Dr. Lee F. Turlington of Birmingham, Alabama.

Other officers were elected as follows:

Dr. Fount Richardson of Fayetteville, Arkansas, president elect; Dr. Robert D. Moreton of Fort Worth, Texas, first vice president; and Dr. Charles Max Cole of Dallas, Texas, second vice president.

The chairman of the Council will be Dr. J. Garber Galbraith of Birmingham, Alabama, and Dr. Guy T. Vise of Meridian, Mississippi, was named vice chairman. Dr. R. H. Kampmeier of Nashville, Tennessee, will continue as Editor of the *Southern Medical Journal.*

Distinguished Service Award

Dr. George E. Burch of New Orleans, Louisiana, was selected as the recipient of the Distinguished Service Award of the Southern Medicial Association. Dr. T. W. Moore of Huntington, a past president of the Association, received the award in 1958.

The third Seale Harris Award was presented to Dr. Henry H. Turner of Oklahoma City for important research accomplishment in the broad field of metabolism, endocrinology, nutrition or for research which contributes to a better understanding of the chemical changes occurring in disease. The Research Medal for meritorious and original research work in contributing to medical science was awarded to Dr. May Owen of Fort Worth, Texas. A special award for dedicated service was given to Mr. C. P. Loranz of Birmingham, Alabama, advisor and special consultant to the Southern Medical Association.

1962 Meeting in Miami Beach

More than 4,500 persons attended the four-day meeting. Headquarters for the meeting was the Adophus Hotel. General scientific sessions and section meetings were held in Memorial Auditorium.

The 56th Annual Meeting of the Southern Medical Association will be held at the Hotel Fontainebleu in Miami Beach, Florida, November 12-15, 1962.

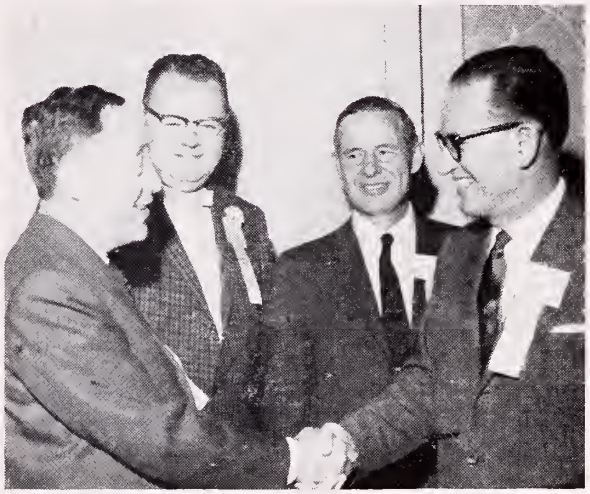
Miss Mary M. Lemons Named Head Of W. Va. Nurses Association

Miss Mary M. Lemons, R. N., Director of Nursing Service at Beckley Memorial Hospital, was elected to a two-year term as president of the West Virginia Nurses Association during the annual meeting in Clarksburg, October 18-20.

The following registered professional nurses were elected as officers during the meeting:

Mrs. Josephine Fultz of Clarksburg, second vice president, and Mrs. Mabel Strong of Glendale, treasurer.

Mrs. Glenice Cather of Grafton and Miss Mae McPhetridge of Beckley were named members of the Board of Directors.



Two West Virginia physicians, Dr. Joseph M. Quintero of Morgantown, right, and Dr. Merle S. Scherr of Charleston, second from left, attended the Fourth International Congress of Allergology in New York City, October 15-20. Others in the picture are Dr. Bernard Halpern of Paris, France, left, president of the organization, and Dr. William B. Sherman of New York City. Doctor Quintero is first vice president of the Association and Doctor Scherr is a member of the organization committee.

3-Year Ob. & Gyn. Residency Program At Charleston Mem. Approved

A three-year residency training program in obstetrics and gynecology at Charleston Memorial Hospital has been approved by the Residency Review Committee for Obstetrics and Gynecology, a group representing the American Board of Obstetrics, the American College of Surgeons and the Council on Medical Education and Hospitals of the American Medical Association.

Dr. John T. Chambers, chief of the department, said approval of the program will enable resident physicians to obtain the necessary training for board eligibility in obstetrics and gynecology.

He said the hospital was approved for a one-year training program several years ago. The staff of the department is composed of seven physicians on the active visiting staff, two interns and two residents. The resident staff will be increased to three later this year.

Large Attendance at Sixth Annual PG Institute in Martinsburg

Several hundred physicians, their wives and guests attended the Sixth Annual Potomac-Shenandoah Valley Postgraduate Institute which was held in Martinsburg, October 27-29.

The Institute is sponsored annually by the Eastern Panhandle Medical Society and the West Virginia Chapter of the American Academy of General Practice. Dr. Halvard Wanger of Shepherdstown is the executive director of the Postgraduate Institute and also served as chairman of the scientific program for this year's meeting.

Drew Pearson, speaker at a banquet held in connection with the Postgraduate Institute in Martinsburg, is flanked by two of the speakers on the scientific program, Dr. Albert Chapman, left, and Dr. John O. Moore. Shown in the background are Drs. Halvard Wanger and Leo H. T. Bernstein.

Dr. John Lee VanMetre of Charles Town served as president of the Institute during the past year, and the treasurer was Dr. Leo H. T. Bernstein of Martinsburg. Dr. Thomas H. McGavack of Martinsburg was in charge of the industrial exhibits and Dr. Jules F. Langlet of Charles Town served as chairman of the scientific exhibits.

The Woman's Auxiliary was in charge of entertainment of wives of visiting physicians. A story concerning the various functions may be found in the Auxiliary Section.

Scientific Program

More than twenty prominent physicians and scientists appeared as guest speakers during the three-day meeting.

One of the speakers, Dr. Perry S. MacNeal, associate clinical professor of medicine at the University of Pennsylvania School of Medicine, delivered an address at a luncheon meeting in addition to presenting a paper at the general scientific session on Saturday morning.

His subject at the luncheon meeting on Sunday, October 29, was "Medical Ethics for the Doctor's Wife."

Address by Drew Pearson

Drew Pearson, newspaper columnist and radio commentator, was the speaker at a banquet held on Saturday evening. He described in detail his two-day interview with Premier Khrushchev during a visit to Russia last summer.

Mr. Pearson talked for approximately 45 minutes and then answered numerous questions from the audience for another 45 minutes.

Dr. Thomas H. McGavack served as toastmaster at the banquet which was attended by more than 150 persons. He also served as moderator during the question and answer period.

Address by Civil War Author

Dr. Randall Connolly of Vienna, president of the West Virginia Chapter of the American Academy of General Practice, served as toastmaster at a banquet which was held on Friday evening.

The speaker was Virgil Carrington Jones of Washington, D. C., prominent Civil War author.

Mr. Jones, whose subject was "Civil War Guerillas in the Eastern Theatre," said that research work had convinced him that guerilla warfare prolonged the Civil War for a period of six months.

'Travel Safety and the Medical Profession'

A former deputy state health commissioner of West Virginia, Dr. Albert Chapman of Washington, presented a paper on "Medical Aspects of Travel Safety" at the scientific session on Saturday afternoon, October 28. He is Assistant Surgeon General, United States Public Health Service.

Another speaker was Dr. John O. Moore, former director of automobile crash injury research at Cornell University.

Dates for 1962 Meeting

The Seventh Annual Institute will be held at the Shenandoah Hotel in Martinsburg, September 13-16, 1962. The Centennial of the Antietan Battle will be observed in nearby Antietan, Maryland, during that same week.

'State of the State's Health'

A new publication, "State of the State's Health," was launched last month as a supplement to the weekly morbidity report prepared by the State Department of Health.

Dr. N. H. Dyer, State Health Director, said the report would be a weekly summary of health conditions for the Executive Department and the people of West Virginia, and would offer a non-technical analysis of morbidity and mortality data, together with brief discussions of other health topics of current interest.

The report is being distributed to local health departments within the state, health officials in other states and interested individuals and organizations and representatives of news media.

MLB Licenses 52 Physicians To Practice in State

The Medical Licensing Board has licensed 52 physicians as the result of the examination at the summer meeting held in Charleston, July 10-12, 1961. Twenty-six physicians were licensed by examination and 26 by reciprocity.

The following physicians were licensed by examination to practice medicine in West Virginia:

Howes, Thomas Martin, Charleston
Kelley, David Leroy, Moundsville
Michelena, Manuel Gonzalez, Lafferty, Ohio
Pitsenberger, John David, Huntington
Spencer, Edward Monroe, Mason

Anderson, Carl Leslie, Glen Dale
Ashworth, Charles Vincent, Burton, Ohio
Bragg, Arthur Dane, Gilbert
Conley, William Gustavus, III, Chapel Hill, N. C.
Drasnin, Ronald, Cincinnati, Ohio

Gemma, Frank Eugene, Charleston
Ghaphery, James Louis, Wheeling
Gilliland, Robert Lee, Belle
Hall, Phillip Warren, Clarksburg
Hatfield, Kenneth Byron, Charleston

Kopinski, Joseph Clemens, Arlington, Va.
McKown, Charles Henry, Jr., Wayne
McWhorter, William David, Clarksburg
O'Connor, Robert Darrell, Charleston
Schwab, Lowell Wayne, Kingwood

Stovall, Richard Lee, Princeton
Strader, Janet, Harman
Temple, Joel Richard, Nitro
Wells, Hawey Adolphus, Jr., Athens
Whittaker, William B., Charleston
Wolfe, Walter Woods, Jr., Chattanooga, Tenn.

The following physicians were licensed by reciprocity:

Albrink, Margaret J., Morgantown
Albrink, Wilhelm Stockman, Morgantown
Arnas, George Manuel, Weirton
Ball, Lawrence Carter, Roanoke
Chamberlain, Charles Richard, Jr., Morgantown
Dye, Robert Arthur, Wheeling
Fink, Gordon Bernard, Morgantown
Glick, Louis Michael, Cumberland, Md.
Hoffman, Charles Anthony, Jr., Huntington
Hunt, Oliver Raymond, Jr., Charleston

Jones, John Evan, Morgantown
Kerns, John Edward, Evanston, Illinois
Klingensmith, Walter Emery, Beckley
Korstanji, Marion C., Huntington
Marshall, James Franklin, Berkeley Springs

Phillips, Ruth Marjory, Morgantown
Ragione, Joseph Alfred, Wheeling
Rogers, Clinton Lloyd, Keyser
Scott, Thomas Francis, Huntington
Smith, David Harvey, Wheeling

Tesi, Julius Mario, Yorkville, Ohio
Ward, Stephen Dailey, Wheeling
Weise, Charles Commodore, Marmet
Whitmore, Edwin B. J., Jr., Huntington
Whittaker, William A., Jr., Pt. Pleasant
Yeakel, Allen, Morgantown

The winter meeting of the Medical Licensing Board will be held at the New State Office Building in Charleston, January 15-17, 1962.

Symposium on Infertility

A Symposium on Infertility, sponsored by the New York University Medical Center in conjunction with the American Society for the Study of Sterility, will be presented at the NYU Medical Center in New York City, February 8-10, 1962.

The program will be devoted equally to the problems in the male, female and the couple. The material will be presented in the form of lectures, panels, and demonstrations.

Further information may be obtained by writing the Associate Dean, New York University Postgraduate Medical School, 550 First Avenue, New York 16, New York.

Dr. Thomas H. McGavack of Martinsburg, left, served as toastmaster at a banquet held during the Postgraduate Institute at Martinsburg. Dr. and Mrs. McGavack are shown with the guest speaker, Drew Pearson of Washington.

More than 150 persons attended the banquet. Shown in the photograph on the right are, left to right, Mr. Louis Cohen of Martinsburg, Dr. and Mrs. J. Keith Pickens of Clarksburg, MissMargaret MacVean of Martinsburg, and Dr. Carl B. Hall of Charleston.

Medical Scholarships Committee Meeting in Parkersburg

Medical scholarships, physician-hospital relations and medical education were among the subjects discussed at a meeting of the Committee on Medical Education, Hospitals and Scholarships, which was held at the Chancellor Hotel in Parkersburg on October 22.

Dr. Russel Kessel of Charleston, the chairman, presided at the meeting which was attended by Drs. Carl B. Hall of Charleston, Thomas L. Harris of Parkersburg, Joe N. Jarrett of Oak Hill, J. P. McMullen of Wellsburg, Clark K. Sleeth of Morgantown, John M. Moore and M. B. Williams of Wheeling, and Mr. William H. Lively of Charleston, secretary ex officio.

The meeting was also attended by Dr. D. E. Greeneltch of Wheeling, president of the State Medical Association.

Doctor Kessel outlined the duties of the committee at the outset of the meeting, and he also discussed the objectives for the ensuing year. He said that four recipients of scholarships awarded by the State Medical Association are currently enrolled in the West Virginia University School of Medicine.

He pointed out that the Association's By-Laws were amended during the 1961 annual meeting to provide for an additional annual scholarship, and that when the program is in full operation there will be eight students enrolled in the School of Medicine under scholarships offered by the Association.

Charles Lively Memorial Scholarship Fund

Doctor Kessel said one amendment increased the dues of active members in the amount of $3 per annum to provide funds for the additional four-year scholarship. An amendment to this particular amendment was adopted designating the existing medical scholarship fund as "The Charles Lively Memorial Scholarship Fund of the West Virginia State Medical Association."

He reported that the President's Page in the November issue of *The West Virginia Medical Journal* would be devoted to an appeal for contributions to supplement the Charles Lively Memorial Scholarship Fund.

It was agreed by the members present that the initial appeal for additional funds should be directed to members of the profession prior to seeking contributions from industry and other sources. The members also agreed that a letter over the signature of the chairman should be mailed to the membership for the purpose of appealing for contributions to the fund.

The chairman was requested to explain in the letter that it is hoped that the scope of the existing program may be expanded to include a loan fund if sufficient contributions are realized.

Doctor Greeneltch was also requested to ask the president of each component society to appoint a physician to serve as chairman of the fund-raising drive on the local level.

Doctor Kessel reported that the Brooke County Medical Society, composed of only six active members, had contributed $1,020 to the fund.

Duties of Committee Enlarged

It was pointed out that the adoption of another amendment to the By-Laws enlarged the duties of the committee as follows:

"This Committee shall make a continuing study of all problems of pre-medical, undergraduate and graduate medical education, hospitals and associated subjects, shall suggest and aid in instituting means and methods for improving conditions in these fields, and shall keep the Council and House of Delegates informed of pertinent developments in the program."

Physician-Hospital Relations

There was considerable discussion concerning the responsibilities of the committee in connection with physician-hospital relations throughout the state. The committee agreed that members of the profession should be informed of the availability of the committee to study problems that cannot be solved on the local level.

Dr. D. E. Greeneltch of Wheeling, president of the West Virginia State Medical Association, was the guest speaker at the regular monthly meeting of the Logan County Medical Society on November 8. Left to right, Dr. Harold Van Hoose, a member of the State Council, Dr. John R. Wilkinson, Jr., secretary of the Society, Doctor Greeneltch, and Dr. Thomas P. Long, president of the Society.

It was emphasized, however, that every effort should be made to settle grievances on the local level prior to referring same to the state committee.

Pre-Medical Education

Another item of business was concerned with the various facets of pre-medical education in state universities and colleges.

Doctor Sleeth outlined briefly the pre-medical curriculum and requirements for admission to the West Virginia University School of Medicine. Several members stressed the importance of including courses in English and public speaking in the pre-medical student's curriculum.

The decline in the number of applications to medical schools was discussed and it was agreed that the Association should urge component societies to sponsor career-day programs in local high schools. It was pointed out that students should be approached during

their junior and senior years in high school concerning careers in medicine and allied fields.

The committee offered its assistance to the deans of state universities and colleges in a continuing study of the problems of pre-medical education.

The chairman appointed Doctor Sleeth as chairman of a sub-committee to make a study of the various problems of pre-medical education, and report back to the committee at the next meeting. The other members are Drs. J. P. McMullen and Carl B. Hall.

Intern and Residency Training Programs

There was considerable discussion concerning intern and residency training programs in hospitals throughout the state. It was agreed that hospitals in the state must raise the standards of their training programs if they expect to attract interns and residents.

Doctor Williams was named chairman of a subcommittee to make a study of intern and residency training programs, and report back at the next meeting of the committee. The other members are Drs. Clark K. Sleeth and Joe N. Jarrett.

Doctor Kessel announced that the next meeting of the committee would be held in Morgantown during the spring. The principal item of business on the agenda will be the selection of the two 1962 scholarship recipients.

Charles A. Okey Named President Of W. Va. Hospital Association

Charles A. Okey, Administrator of Weirton General Hospital, was elected president of the West Virginia Hospital Association during the Annual Meeting held in Morgantown, October 19-21. He succeeds George W. Holman of Clarksburg, Consultant at Union Protestant Hospital.

The new president elect is Steve J. Soltis, Administrator of Beckley Memorial Hospital. Other new officers are as follows:

Mother M. Rosaria of Wheeling, vice president; and J. Harold Laughlin of Charleston, treasurer. Elected as members of the Board of Trustees were A. C. Weaver of Charleston, James E. Huson of Parkersburg, Daniel M. Brown of Huntington and L. Wade Coberly of Elkins.

It was announced that the 1962 meeting of the Association will be held at The Greenbrier in White Sulphur Springs, August 16-18.

Thoracic Society Research Grants

The American Thoracic Society has announced that applications are now being accepted for research grants in the field of respiratory diseases, including tuberculosis, for the year beginning July 1, 1962.

Further information and application forms may be obtained by writing the Division of Research and Statistics, American Thoracic Society, 1790 Broadway, New York 19, New York.

New Association Members

Dr. D. Keith Auvil, 807 Division Street, Parkersburg (Parkersburg Academy). Doctor Auvil, a native of Parsons, West Virginia, attended the two-year School of Medicine at West Virginia University and received his M. D. degree from the Medical College of Virginia in 1956. He interned at Camden-Clark Memorial Hospital in Parkersburg, 1957-58, and was previously located at Beaverdam, Virginia. He is engaged in general practice.

* * * *

Dr. Fred Arnold Kennedy, Hopemont Sanitarium (Preston). Doctor Kennedy was born in Nova Scotia, and received his M. D. degree from the Indiana University School of Medicine in 1927. He interned at St. Francis Hospital in Evanston, Illinois, 1927-28, and was previously located in Chicago. He is superintendent of Hopemont Sanitarium.

* * * *

Dr. Samuel D. Santa Rita, Wyoming General Hospital, Mullens (Wyoming). Doctor Santa Rita, a native of the Philippines, received his M. D. degree from Manila Central University in 1955. He interned at Ohio Valley Hospital in Stubenville, Ohio, 1955-56, and served a residency at Ohio Valley General Hospital in Wheeling, 1956-58. His specialty is anesthesiology.

* * * *

Dr. Joe P. Stanley, Beckley Memorial Hospital (Raleigh). Doctor Stanley was born in Gravelly, Arkansas, and he received his M. D. degree from the University of Arkansas School of Medicine in 1955. He interned at Charity Hospital in New Orleans, 1955-56, and has been serving a residency in internal medicine at Beckley Memorial Hospital since 1959. He served as a Lieutenant in the Medical Corps of the U. S. Navy.

* * * *

Dr. William A. Whittaker, Jr., The Medical Clinic, Pt. Pleasant (Mason). Doctor Whittaker, a native of Bristol, Virginia, received his M. D. degree from the University of Tennessee School of Medicine in 1959. He interned at Hillcrest Medical Center in Tulsa, Oklahoma, 1959-60, and was licensed to practice in West Virginia in 1961. He was previously located in Williamson.

New Orleans Graduate Medical Assembly

The 25th annual meeting of the New Orleans Graduate Medical Assembly will be held at the Roosevelt Hotel in that city, March 12-15. Nineteen prominent physicians and surgeons will appear as guest speakers during the four-day meeting.

A tour to the Mediterranean has been planned following the conclusion of the meeting. Additional information may be obtained by writing Dr. Mannie D. Paine, Jr., Secretary, New Orleans Graduate Medical Assembly, 1430 Tulane Avenue, New Orleans 12, Louisiana.

Ob. & Gyn. Examinations

The American Board of Obstetrics and Gynecology has announced that Part I examinations (written) will be held in various cities in the United States and Canada on January 5, 1962.

It was also announced that the deadline for making applications for examination in 1963 has been advanced to July 1, 1962.

Further information may be obtained by writing Dr. Robert L. Faulkner, Executive Secretary, American Board of Obstetrics and Gynecology, 2105 Adelbert Road, Cleveland 6, Ohio.

ACP Course in New Orleans

The American College of Physicians will present a postgraduate course, "Internal Medicine—Today's Problems in Diagnosis and Management and Tomorrow's Projections," at the Ochsner Foundation Hospital in New Orleans, Louisiana, January 15-18, 1962.

Co-directors of the course are Drs. A. Seldon Mann and William D. Davis, Jr. Registration fee for members will be $60.00 and for non members, $80.00.

Further information may be obtained by writing the American College of Physicians, 4200 Pine Street, Philadelphia 4, Pennsylvania.

'On Tap Like Water'

The more unintelligent members of society who have no sense of personal responsibility for themselves or their families frequently regard the doctor almost as their servant, on tap at any time like water and electricity, who can be summoned whenever trivial illness affects themselves or their family.

They are only aware that they pay large weekly contributions towards social security, and the symbol of that security is the general practitioner, who, the politicians assure them, is at their service any hour of the day or night.—London (England) Sunday Times.

Record Blue Shield Payments

The National Association of Blue Shield Plans announced recently that the 75 Blue Shield Plans in the United States and Canada paid out more than $400 million for care rendered to members during the first six months of 1961.

The payment of $415,201,481 to the medical profession represented a record high for a six-month period, and represented more than 92 per cent of the total income of all Blue Shield Plans. Meanwhile, the plans spent less than 10 per cent of their total income for administrative expenses.

Today's Medical Economics

One of the critical problems facing medicine today is the growing tendency of the working man to equate health care with a municipally owned service while at the same time demanding discount house prices.—Justin C. Smith, Dean, Law-Medicine Center, Western Reserve University.

Medical-Legal Seminar in Hawaii

The 1962 meeting of the International Medical-Legal Society Seminar will be held in Honolulu, Hawaii, February 17-24. The Society is an organization which was founded to promote interprofessional relations between physicians and lawyers.

Additional information concerning the meeting may be obtained by writing Dr. William P. Houser, 1206 South 11th Street, Tacoma 5, Washington.

Medical Meetings, 1962

The following is a partial list of national, state and district medical meetings scheduled for 1962:

Jan. 15-17—Medical Licensing Board, Charleston.
Apr. 9-12—AAGP, Las Vegas, Nevada.
Apr. 22-25—W. Va. Acad. Oph. and Otol., White Sulphur Springs.
May 25-27—W. Va. Chap. AAGP, Charleston.
June 6-8—W. Va. PH Association, Huntington.
June 24-28—AMA Annual Meeting, Chicago.
June 28-29—Seminar on "The Adolescent," WVU Medical Center, Morgantown.
Aug. 16-18—W. Va. Hospital Assn., White Sul. Springs.
Aug. 23-25—W. Va. State Medical Association, The Greenbrier, White Sulphur Springs.
Sept. 13-16—PG Institute, Martinsburg.
Nov. 12-15—Southern Medical, Miami Beach, Fla.
Nov. 26-29—AMA Clinical Meeting, Los Angeles.

Frank E. Bunts PG Course

A postgraduate course on "Surgery of the Liver, Gallbladder, Bile Ducts and Pancreas" will be offered by the Frank E. Bunts Educational Institute, affiliated with the Cleveland Clinic Foundation, in the North Clinic Building in Cleveland, January 10-12.

The course will be presented by staff members of the Cleveland Clinic Foundation assisted by several guest speakers. The registration fee is $30 and, due to limitation of auditorium capacity, registrations will be limited to 125.

Further information may be obtained by writing Dr. Charles L. Leedham, Director of Education, Frank E. Bunts Educational Institute, 2020 East 93rd Street, Cleveland 6, Ohio.

The Value of Learning

As I grow older I value the voice of experience more than the voice of promise. Looking to the freedom of the United States and attempting to analyze how it could be protected and advanced, most verbal pronouncements, particularly from those of little or no demonstrated accomplishment, are discounted. Freedom always comes from the doers, not from those who spend most of their time making excuses and claiming that others should provide their economic and physical security. The time could be so much better spent creating instead of looking for a panacea often designed to make the other fellow through government, do what the individual was unwilling to do for himself. Freedom means so much more to those who have earned it. —Ralph E. Lyne.

You and your patients

should read

the story beginning on page 69—

December, Reader's Digest.

It deals tersely and thoughtfully

with major issues

raised in the investigation of

the prescription drug

industry.

This message is brought to you on behalf
of the producers of prescription drugs.
Pharmaceutical Manufacturers Association
1411 K. Street, N.W., Washington, D.C.

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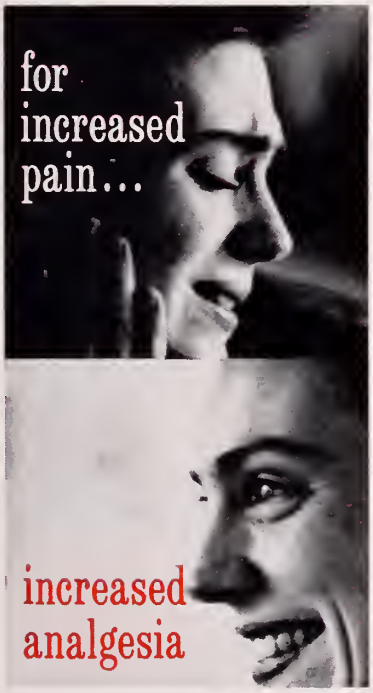

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References: (1) Malone, F. J., Jr.: *Mil. Med.* **125**:836, 1960. (2) Martin, W. J.; Nichols, D. R., & Cook, E. N.: *Proc. Staff Meet. Mayo Clin.* **34**:187, 1959. (3) Ullman, A.: *Delaware M. J.* **32**:97, 1960. (4) Petersdorf, R. G.; Hook, E. W.; Curtin, J. A., & Grossberg, S. E.: *Bull. Johns Hopkins Hosp.* **108**:48, 1961. (5) Jolliff, C. R.; Engelhard, W. E.; Ohlsen, J. R.; Heidrick, P. J., & Cain, J. A.: *Antibiotics & Chemother.* **10**: 694, 1960. (6) Lind, H. E.: *Am. J. Proctol.* **11**:392, 1960.

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Bibliography: (1) Jacobs, L.: GP *24*:93 (Jan.) 1960. (2) Shulman, L.: J.A.M.A. *175*:118-123 (Jan 14) 1961. (3) Moore, C. V., in Wohl, M. G., and Goodhart, R. S.: Modern Nutrition in Health and Disease, ed. 2, Philadelphia, Lea & Febiger, 1960, p. 213.

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